```
                    Welcome to DialogClassic Web(tm)
 Dialog level 05.09.03D
Last logoff:  27dec05 16:39:53
Logon file001 28dec05 15:08:47
          *** ANNOUNCEMENT ***
                    ***
NEW FILES RELEASED
***Index Chemicus (File 302)
***Inspec (File 202)
***Physical Education Index (File 138)
***Computer and Information Systems Abstracts (File 56)
***Electronics and Communications Abstracts (File 57)
***Solid State and Superconductivity Abstracts (File 68)
***ANTE: Abstracts in New Technologies (File 60)
                    ***
RELOADS COMPLETED
*** The 2005 reload of the CLAIMS files (Files 340, 341, 942)
is now available online.

RESUMED UPDATING
***ERIC (File 1)
                    ***
Chemical Structure Searching now available in Prous Science Drug
Data Report (F452), Prous Science Drugs of the Future (F453),
IMS R&D Focus (F445/955), Pharmaprojects (F128/928), Beilstein
Facts (F390), Derwent Chemistry Resource (F355) and Index Chemicus (File 302).
                    ***
     >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
     >>>    of new databases, price changes, etc.      <<<
                    ****
KWIC is set to 50.
HILIGHT set on as ' '
 * * *

File   1:ERIC 1966-2005/Nov
       (c) format only 2005 Dialog

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?

B 155, 5, 73
       28dec05 15:09:06 User259876 Session D831.1
            $0.84    0.240 DialUnits File1
     $0.84  Estimated cost File1
     $0.08  INTERNET
     $0.92  Estimated cost this search
     $0.92  Estimated total session cost   0.240 DialUnits

SYSTEM:OS  - DIALOG OneSearch
  File 155:MEDLINE(R) 1951-2005/Dec 07
        (c) format only 2005 Dialog
 *File 155: Medline has ceased updating as of UD 20051207, until        e
the reload is complete. Please see HELP NEWS 154 for details.
  File   5:Biosis Previews(R) 1969-2005/Dec W4
        (c) 2005 BIOSIS
  File  73:EMBASE 1974-2005/Dec 28
        (c) 2005 Elsevier Science B.V.
```

```
      Set  Items  Description
      ---  -----  -----------
?

S (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
         1635507  LIVER
          453820  HEPATIC
           78663  PROGENITOR
          244305  PRECURSOR
          395442  STEM
      S1    1545  (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
?

S S1 AND (CADAVER OR CADAVERIC OR DONOR)
            1545  S1
           53514  CADAVER
           25605  CADAVERIC
          270535  DONOR
      S2     133  S1 AND (CADAVER OR CADAVERIC OR DONOR)
?

S (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MINUTES)
           10954  DECEASED
           51584  POSTMORTEM
          775793  DEATH
           29721  HRS
          545605  HOURS
          277840  MINUTES
      S3   36096  (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR
                  MINUTES)
?

S S2 AND S3
             133  S2
           36096  S3
      S4       0  S2 AND S3
?


Set     Items   Description
S1       1545   (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2        133   S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3      36096   (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MIN-
             UTES)
S4          0   S2 AND S3
?

S S3 AND (CADAVER OR CADAVERIC OR DONOR)
           36096  S3
           53514  CADAVER
           25605  CADAVERIC
          270535  DONOR
      S5    1383  S3 AND (CADAVER OR CADAVERIC OR DONOR)
?

S (VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
          158864  VIABILITY
         5080900  CELLS
          842640  ORGANS
          761778  TISSUES
```

```
      S6   68433  (VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
?

S S5 AND S6
            1383  S5
           68433  S6
      S7      79  S5 AND S6
?

S S7 AND (LIVER OR HEPATIC)
              79  S7
         1635507  LIVER
          453820  HEPATIC
      S8       7  S7 AND (LIVER OR HEPATIC)
?

RD
      S9       4  RD  (unique items)
?

T S9/3,K/ALL

  9/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.

18285896   PMID: 15995454
 Extracorporeal support for organ donation after cardiac death effectively
 expands the  donor  pool.
  Magliocca Joseph F; Magee John C; Rowe Stephen A; Gravel Mark T; Chenault
Richard  H;  Merion  Robert  M; Punch Jeffrey D; Bartlett Robert H; Hemmila
Mark R
  Department  of  Surgery,  The University of Wisconsin School of Medicine,
Madison WI, USA.
  Journal  of  trauma (United States)  Jun  2005,  58  (6)  p1095-101;
discussion 1101-2,  ISSN 0022-5282  Journal Code: 0376373
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: MEDLINE; Completed

 Extracorporeal support for organ donation after cardiac death effectively
 expands the  donor  pool.
  BACKGROUND:  We  sought  to evaluate the effect on short-term outcomes of
normothermic,  extracorporeal  perfusion  (ECMO)  for donation of abdominal
  organs  for transplantation after cardiac death (DCD). Study parameters
included  increase  in  number  of  donors  and  organs  , types of organs
 procured,  and  viability  of  kidneys  transplanted.  METHODS:  We
retrospectively  reviewed  medical record data for all patients enrolled in
our  ECMO-supported DCD donor protocol between 10/1/2000 to 2/01/2004. We
also  reviewed the records for all patients undergoing organ donation after
brain- death  (DBD) during the study period at our institution. Recipient
data  were obtained and analyzed for all kidneys procured from both groups.
RESULTS:  Twenty  patients  were enrolled in our DCD protocol and underwent
attempted  organ  donation.  Fifteen  patients  completed  the  protocol; 3
maintained  cardiac  function  throughout the prescribed 60 minutes after
withdrawal  of  life  support,  and  two  patients'  organs  were  deemed
unsuitable  for transplantation. Fourteen (70%) of the DCD donor patients
originated  on  the  trauma  service and six (30%) were from other clinical
```

services. The DCD program increased the potential **donor** pool by 33% (61 versus 81 patients) and the number of kidneys transplanted by 24% (100 versus 124). A total of 24 kidney, 5 **liver** , and 1 pancreas transplants were performed with these **organs** . Two of 24 (8.3%) DCD kidneys had delayed graft function. There were no perioperative rejection episodes or deaths. CONCLUSION: The implementation of a DCD protocol using extracorporeal perfusion increased the potential organ **donor** pool at our institution by 33%. This was accomplished without short term adverse effect on organ function compared with kidneys transplanted from DBD donors.

9/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

18009111 PMID: 15759553
Application of sulforaphane--does it lead to improvement of islet graft survival after warm and/or cold ischemia.
Solowiej Ewa; Solowiej Jaroslaw; Kasprzycka-Guttman Teresa; Rowinski Wojciech
Dept of General and Transplantation Surgery, Transplantation Institute, Medical University of Warsaw, Poland. esolowiej@poczta.onet.pl
Annals of transplantation - quarterly of the Polish Transplantation Society (Poland) 2004, 9 (3) p68-71, ISSN 1425-9524 Journal Code: 9802544
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

OBJECTIVES: Brain stem **death** results in ischemic damage of **organs** . To prevent many agents are being tested this damage. The aim of our study was to determine effects of sulforaphane (SF) on recovery, **viability** , lipid peroxidation, metabolic and endocrine function of islets isolated from rat pancreata and treated with warm and/or cold ischemia and then transplanted syngeneically. METHODS: Rat pancreata were recovered from non-heart beating rats after intraducatal injection of collagenase solution after 15 or 30 **minutes** of warm ischemia time (WT). Cold ischemia (CT) was obtained by storage of distended and harvested glands in tubes with UW solution in 4 degrees C for 120 **minutes** . Sulforaphane was administered 24 **hours** before isolation islets in concentration 24mg/kg b.w. Diabetes was achieved by intravenouse injection of streptozotocin (STZ 65mg/kg b.w.). Islets were transplanted into the **liver** through the portal vein. Experimental protocol included four groups: Group I: fresh pancreata not treated with SF, WT=0, CT=0; Group II: 15 or...

... was lower compared to control group (I). The concentration of MDA in groups with SF increased as compared to controls. The highest recovery and cell **viability** was observed in group IV (CT, SF) and in gr. III (WT15, CT, SF; $p<0.05$). In groups exposed to 30 min. of warm ischemia and/or 120 min. of cold preservation was observed higher % of dead islets **cells** . In vivo study shows that islets graft isolated from rat pancreata treated with sulforaphane reverse diabetes. CONCLUSIONS: Based on results we can conclude that SF in concentration 24mg/kg b.w. reveals protective effect on preserved pancreas and may have a potential clinical implication to improve hemodynamically unstable pancreas **donor** condition.
; Animals; Cytoprotection; Diabetes Mellitus, Experimental --physiopathology--PP; Diabetes Mellitus, Experimental--surgery--SU; Islets of Langerhans--physiopathology--PP; **Liver** --surgery--SU; Rats;

Rats, Inbred Strains; Time Factors; Transplantation, Heterotopic

9/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

17593961 PMID: 15730916
Protective effects of glycine pretreatment on brain-death donor liver
.
Zhang Shui-Jun; Shi Ji-Hua; Tang Zhe; Wu Yang; Chen Shi
Department of Surgery, First Affiliated Hospital of Zhengzhou University, Zhengzhou 450052, China. zhangshuijin@zzu.edu.cn
Hepatobiliary & pancreatic diseases international - HBPD INT (China) Feb 2005, 4 (1) p37-40, ISSN 1499-3872 Journal Code: 101151457
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Protective effects of glycine pretreatment on brain-death donor liver
.
BACKGROUND: Morphological and functional changes commonly occur in livers of brain- **death** donors. Prevention of **liver** injury from brain-□death□ will benefit the results of transplantation. This study was conducted to evaluate the protection effects of glycine on the **liver** of brain- **death** **donor** . METHODS: Fourty-two male Wistar rats were randomly divided into brain- **death** **donor** (BDD) group (B), glycine pretreatment group with BDD (G), and strychnine pretreatment group with BDD(S). For these groups, brain **death** model was established in **donor** rats and□liver□transplantation was performed subsequently utilizing microsurgical techniques. After the establishment of the model and during cold rinsing of **liver** donors or **liver** reperfusion of recipients, glycine was given at a dose of 0.6 mmol, 25 micromol and 25 micromol in the group G, and a same...

... of glycine and strychnine (1000 :1) was prescribed for the group S, but nothing for the group B. Before cold rinsing at 2 and 6 **hours** after portal vein(PV) reperfusion, blood samples were taken from infrahepatic vena cava (IHVC) to determine the levels of alanine aminotransferase (ALT), aspartate aminotransferase (AST), tumor necrosis factor alpha (TNF-alpha) and hyaluronic acid (HA). At 6 **hours** after PV reperfusion, graft samples were fixed for morphological observation and apoptosis of hepatocytes was detected using the TUNEL method. RESULTS: Before **liver** cold rinsing and at 2 and 6 **hours** after PV reperfusion, the serum levels of ALT, AST, TNF-alpha, HA and apoptosis index (AI) in the groups B and S were significantly higher...

... the group G ($P<0.05$). There was no significant difference between the groups B and S ($P>0.05$). Electron microscopy showed that Kupffer **cells** were activated and **hepatic** **cells** injured more obviously in the groups B and S than in the group G. CONCLUSION: Glycine pretreatment can improve the **viability** of the **liver** of the brain□ death donor □ rat.
Descriptors: *Brain Death; *Glycine--pharmacology--PD; * **Liver** ; * **Liver** **Transplantation** --methods--MT; *Organ Preservation; *Protective Agents --pharmacology--PD

9/3,K/4 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

13332242 EMBASE No: 2005397564

Glutathione depletion renders rat hepatocytes sensitive to nitric oxide donor -mediated toxicity

Chen T.; Pearce L.L.; Peterson J.; Stoyanovsky D.; Billiar T.R.
T.R. Billiar, Department of Surgery, University of Pittsburgh, F-1281 Presbyterian University Hospital, Pittsburgh, PA 15213 United States
AUTHOR EMAIL: billiartr@upmc.edu

Hepatology (HEPATOLOGY) (United States) 2005, 42/3 (598-607)
CODEN: HPTLD ISSN: 0270-9139
DOCUMENT TYPE: Journal ; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 50

Glutathione depletion renders rat hepatocytes sensitive to nitric oxide donor -mediated toxicity

...either cytoprotective or cytotoxic in hepatocytes, depending on conditions within the cell. We hypothesized that redox status is a determinant of NO effects on cell **viability** . To cause the disturbance of redox homeostasis in the hepatocytes, **cells** were treated with the following glutathione (GSH) depleting agents: (1) chronic depletion by 18 **hours** pretreatment with buthionine sulfoximine (BSO), which depletes GSH by blocking its biosynthesis; and (2) acute depletion by 1 hour pretreatment with diethyl maleate (DEM), which conjugates GSH by the GSH-S-transferase catalyzed reaction. S-nitroso-N-acetyl-D,L-penicillamine (SNAP), a NO **donor** , was added after removal of GSH-depleting agents. Individual treatment with either SNAP or GSH depletion did not appreciably affect **viability** . A significant increase of cytotoxicity in hepatocytes was observed with the combination of a concentration and time course regimen of SNAP and GSH depletion. SNAP...

...conclusion, the disruption of cellular redox homeostasis by GSH depletion leads hepatocytes to be more susceptible to NO (especially S-nitrosothiols) and subsequent necrotic cell **death** .

DRUG DESCRIPTORS:
*glutathione--endogenous compound--ec; *nitric oxide **donor** ; *nitric oxide --drug toxicity--to
MEDICAL DESCRIPTORS:
* **liver** cell; *cytotoxicity
?

Set	Items	Description
S1	1545	(LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2	133	S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3	36096	(DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MINUTES)
S4	0	S2 AND S3
S5	1383	S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6	68433	(VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7	79	S5 AND S6
S8	7	S7 AND (LIVER OR HEPATIC)
S9	4	RD (unique items)

?

S S2 NOT PY>2000
133 S2

```
         7838014  PY>2000
     S10      56  S2 NOT PY>2000
?

RD
     S11      27  RD  (unique items)
?


Set     Items   Description
S1       1545   (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2        133   S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3      36096   (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MIN-
             UTES)
S4          0   S2 AND S3
S5       1383   S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6      68433   (VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7         79   S5 AND S6
S8          7   S7 AND (LIVER OR HEPATIC)
S9          4   RD  (unique items)
S10        56   S2 NOT PY>2000
S11        27   RD  (unique items)
?

S (HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
          71230  HARVESTED
         609030  COLLECTED
        5080900  CELLS
         761778  TISSUES
         842640  ORGANS
     S12 101001  (HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
?

S S12 (S) (HOURS OR MINUTES)
         101001  S12
         545605  HOURS
         277840  MINUTES
     S13   7611  S12 (S) (HOURS OR MINUTES)
?


Set     Items   Description
S1       1545   (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2        133   S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3      36096   (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MIN-
             UTES)
S4          0   S2 AND S3
S5       1383   S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6      68433   (VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7         79   S5 AND S6
S8          7   S7 AND (LIVER OR HEPATIC)
S9          4   RD  (unique items)
S10        56   S2 NOT PY>2000
S11        27   RD  (unique items)
S12    101001   (HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
S13      7611   S12 (S) (HOURS OR MINUTES)
?

S S10 AND S13
             56  S10
```

```
            7611  S13
     S14       0  S10 AND S13
?


Set     Items   Description
S1       1545   (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2        133   S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3      36096   (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MIN-
             UTES)
S4          0   S2 AND S3
S5       1383   S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6      68433   (VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7         79   S5 AND S6
S8          7   S7 AND (LIVER OR HEPATIC)
S9          4   RD  (unique items)
S10        56   S2 NOT PY>2000
S11        27   RD  (unique items)
S12    101001   (HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
S13      7611   S12 (S) (HOURS OR MINUTES)
S14         0   S10 AND S13
?

T S11/3,K/ALL

  11/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.

16075202   PMID: 15256967
  Fetal  tissue banking for transplantation: characteristics of the donor
  population and considerations for  donor  and tissue screening.
  Newman-Gage  H;  Bravo  D;  Holmberg L; Mason J; Eisenhower M; Nekhani N;
Fantel A
  Northwest  Tissue  Center/Puget Sound Blood Center, Seattle, WA, USA; 921
Terry  Avenue,  Seattle,  WA  98104,  USA  (Phone/Fax: (206) 292-2317 (206)
343-1776).
  Cell Tissue Bank (Netherlands)   2000,  1  (1)  p45-53,  ISSN 1389-9333
Journal Code: 100965121
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: In Data Review

  Fetal  tissue banking for transplantation: characteristics of the donor
  population and considerations for  donor  and tissue screening.
  ... evaluate  the  suitability  for therapeutic use in transplantation of
tissues  obtained from human abortuses. We have developed protocols for the
collection,  handling  and  preservation  of  hepatic  stem cells from
electively aborted embryos and have developed methods for assessment of the
cells so derived and processed. In this paper we present our findings...

... and  present  data  regarding  the  real  availability  of tissues from
elective  abortion procedures that would meet those standard tissue banking
criteria.We  specifically  evaluated the donor 's willingness to provide a
blood  sample  for testing, conducted a detailed interview similar to those
used for typical organ and tissue donors, and assessed...
```

11/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

13091451 PMID: 11062533
Purified hematopoietic stem cells can differentiate into hepatocytes in vivo.
Lagasse E; Connors H; Al-Dhalimy M; Reitsma M; Dohse M; Osborne L; Wang X ; Finegold M; Weissman I L; Grompe M
StemCells, 525 Del Rey Avenue, Suite C, Sunnyvale, California 94085, USA. elagasse@stemcell.net
Nature medicine (UNITED STATES) Nov 2000, 6 (11) p1229-34, ISSN 1078-8956 Journal Code: 9502015
Publishing Model Print; Comment in Nat Med. 2000 Nov;6(11) 1212-3; Comment in PMID 11062526
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

The characterization of **hepatic progenitor** cells is of great scientific and clinical interest. Here we report that intravenous injection of adult bone marrow cells in the FAH(-/-) mouse, an animal...

...I, rescued the mouse and restored the biochemical function of its liver. Moreover, within bone marrow, only rigorously purified hematopoietic stem cells gave rise to **donor** -derived hematopoietic and hepatic regeneration. This result seems to contradict the conventional assumptions of the germ layer origins of tissues such as the liver, and...

11/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

12538660 PMID: 9853824
Liver disease and compensatory growth: unexpected lessons from genetically altered mice.
Braun K M; Sandgren E P
University of Wisconsin-Madison, School of Veterinary Medicine, Department of Pathobiological Sciences, 53706, USA.
International journal of developmental biology (SPAIN) 1998, 42 (7) p935-42, ISSN 0214-6282 Journal Code: 8917470
Contract/Grant No.: DK49787; DK; NIDDK; ES07671; ES; NIEHS
Publishing Model Print
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... been used to demonstrate: (1) the remarkable ability of adult hepatocytes to clonally proliferate in response to liver growth signals, (2) the effectiveness of transplanted **donor** hepatocytes in repopulating damaged liver parenchyma, and (3) the feasibility of reconstituting liver with xenogeneic hepatocytes. This paper reviews the development and use of these models, and outlines their potential future application to the study of **hepatic stem** cells, therapy of liver disease and hepatic toxicology.

11/3,K/4 (Item 4 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

12188241 PMID: 9493286
Anti-NK antibodies injected into recipient mice enhance engraftment and chimerism after allogeneic transplantation of fetal liver stem□ cells.□
Chargui J; Moya M J; Sanhadji K; Blanc-Brunat N; Touraine J L
Department of Transplantation and Clinical Immunology, Hopital Edouard Herriot, Lyon, France.
Thymus (NETHERLANDS) 1997, 24 (4) p233-46, ISSN 0165-6090 Journal Code: 8009032
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Anti-NK antibodies injected into recipient mice enhance engraftment and chimerism after allogeneic transplantation of fetal liver stem□ cells.□
... mice (H-2b) on day 2. One month after fetal liver cell transplantation, all mice from group A demonstrated engraftment and chimerism; at this time, **donor** cells accounted for more than 50% of peripheral blood mononuclear cells (PBMC). In contrast, in group B, only one mouse had 26% of **donor** cells among PBMC and all other mice had less than 10%. At two months, results were virtually identical in group A (over 72% of **donor** cells among PBMC from all mice) and slightly improved in group B (0-38% of **donor** cells). After the third month and continuously until the 12th month, the stability of chimerism was established in group A (over 55% of **donor** cells in 7 of the 9 mice) but had virtually disappeared in group B (0-2% of **donor** cells in all mice). Tissue analysis demonstrated the improved reconstitution of the thymus and the spleen in mice from group A. The proliferative responses of...

11/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11402266 PMID: 8723800
In utero transplantation of fetal liver stem **cells into human fetuses.**
Touraine J L
Department of Transplantation & Clinical Immunology, Hopital Edouard Herriot, Lyon, France.
Journal of hematotherapy (UNITED STATES) Apr 1996, 5 (2) p195-9, ISSN 1061-6128 Journal Code: 9306048
Publishing Model Print
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

In utero transplantation of fetal liver stem **cells into human fetuses.**
... remarkable advantages: (a) tolerance induction due to immune immaturity of the host, (b) lack of graft-versus-host disease (GVHD) due to immaturity of the **donor** , (c) ideal isolation of the fetus in the maternal uterus, and (d) optimal environment for **donor** fetal cell development in the vicinity of host fetal cells and growth factors.

11/3,K/6 (Item 6 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11394013 PMID: 8679101
Stem cells from bone marrow, umbilical cord blood and peripheral blood for clinical application: current status and future application.
Lu L; Shen R N; Broxmeyer H E
Department of Medicine (Hematology/Oncology), Indiana University School of Medicine, Indianapolis 46202-5121, USA.
Critical reviews in oncology/hematology (IRELAND) Mar 1996, 22 (2) p61-78, ISSN 1040-8428 Journal Code: 8916049
Contract/Grant No.: R01 CA HL46549; CA; NCI; R01 HL 49202; HL; NHLBI; R37 CA 36464; CA; NCI
Publishing Model Print
Document type: Journal Article; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... treatment of selected patients with malignant disease and non-malignant hematological disorders. However, its use is limited by availability of human leukocyte antigens (HLA)-matched **donor** cells, engraftment and graft-versus-host disease (GVHD). Prevention of GVHD, improvement in the speed and quality of marrow reconstitution, and screening of new immunomodulating...

... characterization and ex vivo expansion; (b) bone marrow stem cell transplantation; (c) cord blood stem cell transplantation; (d) peripheral blood stem cell transplantation; (e) fetal **liver stem** cell transplantation; (f) in utero stem cell transplantation; and (g) evaluation of the capacity of stem cells to serve as targets for gene therapy.

11/3,K/7 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11388443 PMID: 8690049
Facilitating cells enable engraftment of purified fetal liver stem **cells in allogeneic recipients.**
Gaines B A; Colson Y L; Kaufman C L; Ildstad S
Division of Cellular Therapeutics, Department of Surgery, University of Pittsburgh, PA 15261, USA.
Experimental hematology (UNITED STATES) Jul 1996, 24 (8) p902-13, ISSN 0301-472X Journal Code: 0402313
Contract/Grant No.: RO1 A130615; PHS
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Facilitating cells enable engraftment of purified fetal liver stem **cells in allogeneic recipients.**
... of mouse fetal liver cells in syngeneic and allogeneic recipients. Transplantation of unmodified fetal liver cells into allogeneic recipients results in stable multilineage chimerism with **donor** -specific tolerance, indicating that the pluripotent hematopoietic stem cell is present in fetal

liver and is capable of engraftment in allogeneic adult recipients. Similarly, 2000 to 3000 sorted fetal **liver stem** cells (Sca+/c-kit+/Lin-) successfully reconstituted lethally irradiated syngeneic adults and adults differing only in minor histocompatibility antigens. Two thousand to 10,000 fetal...

11/3,K/8 (Item 8 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11062063 PMID: 7635180
Long-term repopulating abilities of enriched fetal liver stem **cells measured by competitive repopulation.**
Jordan C T; Astle C M; Zawadzki J; Mackarehtschian K; Lemischka I R; Harrison D E
Department of Molecular Biology, Princeton University, NJ, USA.
Experimental hematology (UNITED STATES) Aug 1995, 23 (9) p1011-5, ISSN 0301-472X Journal Code: 0402313
Contract/Grant No.: AG-01838; AG; NIA; DK-25687; DK; NIDDK; HL-46536; HL; NHLBI
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Long-term repopulating abilities of enriched fetal liver stem **cells measured by competitive repopulation.**
... with fetal cell fractions from congenic donors having genetically distinguishable markers, and mixtures were given to irradiated recipients. Differentiating and repopulating abilities of the enriched **donor** cells were measured by the proportions of myeloid and lymphoid cells having **donor** markers that repopulated the recipients. LTRA was found primarily in the AA4.1+ and AA4.1+/Sca+ subpopulations. Further fractionation of the AA4.1+ cells...

11/3,K/9 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10920585 PMID: 7703497
Dysfunctional cytokine production by host-reactive T-cell clones isolated from a chimeric severe combined immunodeficiency patient transplanted with haploidentical bone marrow.
Bacchetta R; Parkman R; McMahon M; Weinberg K; Bigler M; de Vries J E; Roncarolo M G
Human Immunology Department, DNAX Research Institute, Palo Alto, CA 94304-1104, USA.
Blood (UNITED STATES) Apr 1 1995, 85 (7) p1944-53, ISSN 0006-4971 Journal Code: 7603509
Publishing Model Print
Document type: Case Reports; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

...mother. At 4 years after transplantation, T cells, natural killer (NK) cells, and a small percentage (2%) of B cells were found to be of **donor**

origin, whereas monocytes and the majority of B cells remained of host origin. In primary mixed lymphocyte cultures (MLC), the engrafted T cells of the **donor** did not proliferate in response to the host cells, whereas untransplanted **donor** T cells showed good proliferative responses. However, CD4+ and CD8+ T-cell clones of **donor** origin with specificity for class II and class I HLA determinants of the host were isolated. CD8+, host-reactive T-cell clones displayed normal cytotoxic...

... is present. These results, together with our previous observation that dysfunctional, host-reactive T-cell clones can be isolated in SCID patients transplanted with fetal **liver stem** cells, demonstrate that lack of clonal deletion of host-reactive T cells is a general phenomenon after HLA-mismatched stem cell transplantation.

11/3,K/10 (Item 10 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10515932 PMID: 7905018
High levels of interleukin 10 production in vivo are associated with tolerance in SCID patients transplanted with HLA mismatched hematopoietic stem cells.
Bacchetta R; Bigler M; Touraine J L; Parkman R; Tovo P A; Abrams J; de Waal Malefyt R; de Vries J E; Roncarolo M G
Human Immunology Department, DNAX Research Institute, Palo Alto, California 94303-1104.
Journal of experimental medicine (UNITED STATES) Feb 1 1994, 179 (2) p493-502, ISSN 0022-1007 Journal Code: 2985109R
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Transplantation of HLA mismatched hematopoietic stem cells in patients with severe combined immunodeficiency (SCID) can result in a selective engraftment of T cells of **donor** origin with complete immunologic reconstitution and in vivo tolerance. The latter may occur in the absence of clonal deletion of **donor** T lymphocytes able to recognize the host HLA antigens. The activity of these host-reactive T cells is suppressed in vivo, since no graft-vs...

... observed in these human chimeras. Here it is shown that the CD4+ host-reactive T cell clones isolated from a SCID patient transplanted with fetal **liver stem** cells produce unusually high quantities of interleukin 10 (IL-10) and very low amounts of IL-2 after antigen-specific stimulation in vitro. The specific...

... high in vivo IL-10 mRNA expressions in the T and non-T cell compartment were also observed in three SCID patients transplanted with fetal **liver stem** cells and in four SCID patients transplanted with T cell-depleted haploidentical bone marrow stem cells. Taken together, these data indicate that high endogenous IL-10 production is a general phenomenon in SCID patients in whom allogenic stem cell transplantation results in immunologic reconstitution and induction of tolerance. Both **donor** T cells and host accessory cells contribute to these high levels of IL-10, which would suppress the activity of host-reactive T cell in...

11/3,K/11 (Item 11 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10459814 PMID: 8163597
[A "scandal": segment IV and liver transplantation]
Un scandale: segment IV et transplantation du foie.
Couinaud C
Journal de chirurgie (FRANCE) Nov 1993, 130 (11) p443-6, ISSN 0021-7697 Journal Code: 0374754
Publishing Model Print
Document type: Journal Article ; English Abstract
Languages: FRENCH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... segment is no longer in function and doomed to atrophy. In 10.75% of the livers (n = 99), the segmental artery comes from the right **hepatic stem** , and the segment is correctly vascularized; but in most cases interruption of both the artery and the portal branches leads to immediate necrosis, which may...

... few cases: cholangiography and arteriography detect the favourable dispositions. In all other cases such partition is forbidden. Procurement of the left lobe from a living **donor** with preservation of segment IV is rarely possible, such cases being detected by a thorough pre-operative vasculo-biliary investigation: the left lobe is harvested...

11/3,K/12 (Item 12 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

10109269 PMID: 8450037
Chimerism and tolerance to host and donor **in severe combined immunodeficiencies transplanted with fetal** liver stem□ cells.□
Bacchetta R; Vandekerckhove B A; Touraine J L; Bigler M; Martino S; Gebuhrer L; de Vries J E; Spits H; Roncarolo M G
Human Immunology Department, DNAX Research Institute, Palo Alto, California 94304.
Journal of clinical investigation (UNITED STATES) Mar 1993, 91 (3) p1067-78, ISSN 0021-9738 Journal Code: 7802877
Publication Model Print
Document type: Case Reports; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Chimerism and tolerance to host and donor **in severe combined immunodeficiencies transplanted with fetal** liver stem□ cells.□
... studied the peripheral T cell repertoire of two patients with severe combined immunodeficiency who were successfully treated with human histocompatibility leukocyte antigen (HLA)-mismatched fetal **liver stem** cell transplantation. The patients presented a split chimerism. T cells were of **donor** origin, whereas the B cells/monocytes were of the host phenotype. Interestingly, the natural killer (NK) cells in one patient were **donor** derived and in the other patient of host origin. The NK cells were functional but did not have antihost or **donor** reactivity. Despite the HLA mismatch between **donor** and host cells, complete tolerance was achieved in vivo, and a specific unresponsiveness of peripheral blood mononuclear cells

from both patients toward the host cells...

... of CD8+ host-reactive T cells were high, and were in the same range as those observed for CD8+ alloreactive T cells. In contrast, no **donor** -reactive CD8+ T cells or host or **donor** -reactive TCR gamma delta + T cells were detected. These data indicate that, after fetal stem cell transplantation, **donor** -reactive, but not host-reactive cells, are deleted from the T cell repertoire. Therefore, a peripheral mechanism of suppression or clonal anergy, rather than clonal...

11/3,K/13 (Item 13 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09877880 PMID: 1354521
T cell repertoire and tolerance after fetal stem cell transplantation.
Roncarolo M G; Bacchetta R
DNAX Research Institute, Palo Alto, CA 94304.
Bone marrow transplantation (ENGLAND) 1992, 9 Suppl 1 p127-8, ISSN 0268-3369 Journal Code: 8702459
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

We studied the T cell repertoire and the mechanism of tolerance in two patients with severe combined immunodeficiency transplanted with HLA mismatched fetal **liver** **stem** cells. They are 17 and 5 years old now, healthy, and show normal immunoresponses to recall antigens. Their T cells are of **donor** origin, whereas monocytes and B cells remained of the host. The NK cells have different sources since in one patient they derive from the **donor** and in the other one from the host. Despite the HLA mismatch between **donor** and host cells, no acute or chronic graft-versus-host disease was observed. In vitro experiments with PBMC showed specific nonresponsiveness for the HLA antigens...

...experiments indicated that the frequency of CD8+ host-reactive cells was in the same range as that observed for alloreactive T cells. In contrast, no **donor** reactive CD8+ T cells could be isolated. Host-reactive CD4+ and CD8+ T cell clones were normal in their capacity to produce IL-2, IFN...

... to inhibit the proliferative responses of the CD4+ host-reactive T cell clones. Our data demonstrate that host-reactive cells are not deleted from the **donor** T cell repertoire following allogenic fetal **liver** **stem** cell transplantation. Therefore, in vivo tolerance between the host and the **donor** is maintained by a peripheral autoregulatory mechanism in which cytokines may play a role.

11/3,K/14 (Item 14 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09526023 PMID: 1680506
In utero transplantation of fetal liver stem□ cells in humans.□
Touraine J L
Department of Transplantation and Clinical Immunology, Claude Bernard University, Hopital Edouard Herriot, Lyon, France.

Blood cells (GERMANY) 1991, 17 (2) p379-87, ISSN 0340-4684
Journal Code: 7513567
Publishing Model Print
Document type: Case Reports; Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

In utero transplantation of fetal liver stem□ cells in humans.□
...we treated were 28, 26, and 12 weeks of age (weeks after fecundation). The first two patients had immunodeficiencies, the third one had thalassemia major. **Donor** cells were obtained from 7- to 10-week-old fetuses, with conditions approved by the National Committee for Bioethics. Donors and recipients were not matched...

... ultrasonic visualization. The first patient, born in 1988, has evidence of engraftment and reconstitution of cell-mediated immunity: initially 10% than 26% of lymphocytes of **donor** origin (with distinct phenotype), T cell responses to tetanus toxoid and candida antigens. This child, who had bare lymphocyte syndrome, has no clinical manifestation of...

... home. The second child was born in 1989 and it is too early for a thorough evaluation of the immunological effects of the transplant, although **donor** cell engraftment has been proven (Y chromosome in this female patient). The third patient has also evidence of **donor** cell take (Y chromosome in a female patient) but the effect on thalassemia has not yet been fully analyzed (**donor** hemoglobin present in small quantity). In all three cases, no side effect of any kind developed in the mother nor in the fetus.(ABSTRACT TRUNCATED...

11/3,K/15 (Item 15 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09474034 PMID: 1864981
Recapitulation of normal and abnormal BB rat immune system development in scid mouse/rat lymphohemopoietic chimeras.
Greiner D L; Shultz L D; Rossini A A; Mordes J P; Handler E S; Rajan T V
Department of Pathology, University of Connecticut Health Center, Farmington 06030.
Journal of clinical investigation (UNITED STATES) Aug 1991, 88 (2) p717-9, ISSN 0021-9738 Journal Code: 7802877
Contract/Grant No.: DK25036; DK; NIDDK; DK36024; DK; NIDDK; DK41235; DK; NIDDK; +
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... and readily accept tumor xenografts. Partial lymphohemopoietic scid/human and mouse/rat chimeras have been described, but complete chimerization with thymic engraftment and generation of **donor** -origin thymocytes has not been achieved. We now report that low-dose irradiation permits the engraftment of BB rat fetal **liver stem** cells in scid recipients. We observed that BB rat fetal liver cells injected into irradiated scid mice establish a rat hemopoietic system in the scid...

...chimeras created using fetal liver cells from the abnormal (lymphopenic,

diabetes prone) subline of BB rats recapitulated both the quantitative and phenotypic abnormalities of the **donor** rat. Xenogeneic lymphohemopoietic chimeras established in scid mice may provide a powerful new tool in the study of immune system development and autoimmunity.

11/3,K/16 (Item 16 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09445119 PMID: 1676648
Phenacetin and acetaminophen metabolism in the isolated perfused rat liver . Precursor concentration influences the selection of kinetic parameters to assess hypoxic impairment.
Studenberg S D; Brouwer K L
Curriculum in Toxicology, School of Pharmacy, University of North Carolina, Chapel Hill 27599-7360.
Drug metabolism and disposition- the biological fate of chemicals (UNITED STATES) Mar-Apr 1991, 19 (2) p423-9, ISSN 0090-9556 Journal Code: 9421550
Contract/Grant No.: 5-T32-ES07126; ES; NIEHS
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Phenacetin and acetaminophen metabolism in the isolated perfused rat liver . Precursor concentration influences the selection of kinetic parameters to assess hypoxic impairment.
... alterations in conjugation of administered acetaminophen, in isolated perfused rat livers. A recirculating perfusion system containing either 20% (normoxic conditions) or 2.5% (hypoxic conditions) **donor** rat blood delivered 4.46 and 1.47 mumol/min/g liver oxygen, respectively, resulting in a 44% reduction in oxygen consumption during hypoxia. The...

11/3,K/17 (Item 17 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08668618 PMID: 2665241
Selective proliferation of chemically altered rat liver epithelial cells following hepatic transplantation.
Faris R A; Hixson D C
Department of Medical Oncology, Rhode Island Hospital, Providence 02903.
Transplantation (UNITED STATES) Jul 1989, 48 (1) p87-92, ISSN 0041-1337 Journal Code: 0132144
Contract/Grant No.: CA 42716; CA; NCI
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Although proliferation of oval cells is often observed during the early stages of chemical hepatocarcinogenesis, the role of these putative **hepatic stem** cells during the neoplastic process is unknown. In earlier studies our laboratory showed that feeding a choline-deficient (CD) diet containing 0.05% 2-acetylaminofluorene...

... containing gamma-glutamyl-transpeptidase (GGT)-positive oval cells (greater than 75%) was isolated from ACI rats maintained on CD-AAF diet for 3 weeks. The **donor** cells were transplanted via the portal vein into livers of male F1 progeny (LExACI) that had been fed a CD diet for 7 days prior...

...hepatectomy and the cell suspension. Host rats were then fed either a CD or choline-supplemented (CS) diet for 12 weeks and killed. Colonies of **donor** -derived cells identified in frozen sections by their lack of reactivity with ACI anti-LE alloantiserum in indirect immunofluorescence (IF) assays were only observed in rats continuously fed the CD diet. Histochemical analysis indicated that the **donor** -derived colonies expressed GGT, a preneoplastic marker for liver cancer. IF assays using MAbs previously shown to be capable of distinguishing between oval cells and mature hepatocytes indicated that the **donor** -derived colonies consisted of a mixture of cells with phenotypes resembling those of mature and immature hepatocytes rather than those of oval or ductal cells. Although the cellular origin of the GGT+ **donor** -derived colonies has not been unequivocally resolved, our results demonstrate that the livers of rats fed a CD-AAF diet contain a chemically altered call...

... can be induced to proliferate by a CD diet. In contrast, a CD diet did not promote colonization when normal hepatocytes were employed as the **donor** cell population, suggesting that the GGT+ oval cells and not the few contaminating GGT- hepatocytes (1%) in the CD-AAF **donor** cell suspension were the preneoplastic precursors that gave rise to **donor** -derived colonies. This transplantation protocol will be useful to define the biological potential of chemically altered liver cells during carcinogenesis.

11/3,K/18 (Item 18 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

07279015 PMID: 4009059
Effects of the degree of saturation of dietary fat on the hepatic production of lipoproteins in the African green monkey.
Johnson F L; St Clair R W; Rudel L L
Journal of lipid research (UNITED STATES) Apr 1985, 26 (4) p403-17, ISSN 0022-2275 Journal Code: 0376606
Contract/Grant No.: HL14164; HL; NHLBI; HL24736; HL; NHLBI
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

...of saturated versus polyunsaturated dietary fat on hepatic lipoprotein secretion. The rate of cholesterol accumulation in liver perfusates was correlated with the size of the **donor** 's plasma LDL, but for any rate, a smaller plasma LDL was found in **donor** animals of the safflower oil group than in those of the butter group. Hepatic very low density lipoproteins (VLDL) were smaller in the safflower oil...

...decreased plasma LDL size even though it increased the cholesteryl ester content of lipoproteins secreted by the liver. Therefore, intravascular formation of plasma LDL from **hepatic precursor** lipoproteins appears to include the removal of relatively greater amounts of cholesteryl esters

from the precursor lipoproteins in polyunsaturated fat-fed animals.

11/3,K/19 (Item 19 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

06673118 PMID: 6874948
Studies on the production of low density lipoproteins by perfused livers from nonhuman primates. Effect of dietary cholesterol.
Johnson F L; St Clair R W; Rudel L L
Journal of clinical investigation (UNITED STATES) Jul 1983, 72 (1) p221-36, ISSN 0021-9738 Journal Code: 7802877
Contract/Grant No.: 14164; PHS
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... perfusates from test diet-fed vs. control diet-fed monkeys and was positively correlated with both the plasma cholesterol concentration and LDL size in the **donor** animal. All perfusate d less than 1.063 g/ml lipoprotein subfractions from livers of test diet-fed monkeys were enriched in cholesteryl ester severalfold...

... that large molecular weight plasma LDL are not directly secreted by the liver but instead probably result from further intravascular metabolism of cholesteryl ester-enriched **hepatic precursor** lipoproteins.

11/3,K/20 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0010790337 BIOSIS NO.: 199799424397
Phenotypic and functional evidence for the expression of CD4 by hematopoietic stem cells isolated from human fetal liver
AUTHOR: Muench Marcus O; Roncarolo Maria Grazia; Namikawa Reiko (Reprint)
AUTHOR ADDRESS: DNAX Res. Inst. Molecular Cellular Biol., 901 California Ave., Palo Alto, CA 94304-1104, USA**USA
JOURNAL: Blood 89 (4): p1364-1375 1997 1997
ISSN: 0006-4971
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: human fetal thymic fragments, supportive of T-cell growth, implanted in scid/scid (SCID) mice. However, in SCID-hu mice transplanted with graded doses of **donor** cells ranging from 2.0 times 10-2 to 2.0 times 10-4 cells, BM reconstitution by the CD4+ fraction of CD34++ Lin- cells...
DESCRIPTORS:
MISCELLANEOUS TERMS: ... **LIVER PROGENITOR** CELL

11/3,K/21 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009607270 BIOSIS NO.: 199598075103
Fetal tissue banking-the right time is now
AUTHOR: Liu D T Y
AUTHOR ADDRESS: Dep. Obstetrics Gynaecol., Univ. Nottingham, City Hosp., Hucknall Road, Nottingham NG5 1PB, UK**UK
JOURNAL: British Journal of Obstetrics and Gynaecology 101 (12): p 1031-1032 1994 1994
ISSN: 0306-5456
DOCUMENT TYPE: Article
RECORD TYPE: Citation
LANGUAGE: English

DESCRIPTORS:
MISCELLANEOUS TERMS: FIRST TRIMESTER PROGENITOR FETAL **LIVER** **STEM** CELL BANK...

...POTENTIAL **DONOR**

11/3,K/22 (Item 3 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0004728786 BIOSIS NO.: 198580037681
EFFECTS OF THE DEGREE OF SATURATION OF DIETARY FAT ON THE HEPATIC PRODUCTION OF LIPOPROTEINS IN THE AFRICAN GREEN MONKEY CERCOPITHECUS-AETHIOPS
AUTHOR: JOHNSON F L (Reprint); ST CLAIR R W; RUDEL L L
AUTHOR ADDRESS: DEPARTMENT OF COMPARATIVE MEDICINE, BOWMAN GRAY SCHOOL OF MEDICINE OF WAKE FOREST UNIVERSITY, WINSTON-SALEM, NC 27103, USA**USA
JOURNAL: Journal of Lipid Research 26 (4): p403-417 1985
ISSN: 0022-2275
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: of saturated vs. polyunsaturated dietary fat on hepatic lipoprotein secretion. The rate of cholesterol accumulation in liver perfusates was correlated with the size of the **donor** 's plasma LDL, but for any rate, a smaller plasma LDL was found in **donor** animals of the safflower oil group than in those of the butter group. Hepatic very low density lipoproteins (VLDL) were smaller in the safflower oil...

...decreased plasma LDL size even though it increased the cholesteryl ester content of lipoproteins secreted by the liver. Therefore, intravascular formation of plasma LDL from **hepatic** **precursor** lipoproteins appears to include the removal of relatively greater amounts of cholesteryl esters from the precursor lipoproteins in polyunsaturated fat-fed animals. [Atherosclerosis implications are...

11/3,K/23 (Item 4 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)
(c) 2005 BIOSIS. All rts. reserv.

0004217295 BIOSIS NO.: 198477049206
THE PRODUCTION OF LOW DENSITY LIPO PROTEINS BY PERFUSED LIVERS FROM NONHUMAN PRIMATES EFFECT OF DIETARY CHOLESTEROL
AUTHOR: JOHNSON F L (Reprint); CLAIR R W S; RUDEL L L
AUTHOR ADDRESS: DEP PATHOLOGY, BOWMAN GRAY SCH MED WAKE FOREST UNIV,

WINSTON-SALEM, NC 27103, USA**USA
JOURNAL: Journal of Clinical Investigation 72 (1): p221-236 1983
ISSN: 0021-9738
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

...ABSTRACT: perfusates from test diet-fed vs. control diet-fed monkeys and was positively correlated with both the plasma cholesterol concentration and LDL size in the **donor** animal. All perfusate d < 1.063 g/ml lipoprotein subfractions from livers of test diet-fed monkeys were enriched in cholesteryl ester severalfold over the...

...that large molecular weight plasma LDL are not directly secreted by the liver, but instead probably result from further intravascular metabolism of cholesteryl ester-enriched **hepatic precursor** lipoproteins.

11/3,K/24 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

10902941 EMBASE No: 2000385765
Liver stem **cells from bone marrow [2] (multiple letters)**
McDonnell W.M.; Nelson J.L.; Theise N.D.; Krause D.S.; Mehal W.; Illei P.B.
Dr. W.M. McDonnell, Division of Gastroenterology, University of Michigan, Ann Arbor, MI United States
Hepatology (HEPATOLOGY) (United States) 2000, 32/5 (1181)
CODEN: HPTLD ISSN: 0270-9139
DOCUMENT TYPE: Journal; Letter
LANGUAGE: ENGLISH

Liver stem **cells from bone marrow [2] (multiple letters)**
MEDICAL DESCRIPTORS:
liver cell; stem cell; polymerase chain reaction; autoimmune hepatitis; liver transplantation; organ **donor** ; bone marrow cell; in situ hybridization; human; nonhuman; letter; priority journal

11/3,K/25 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

10650164 EMBASE No: 2000115146
Closing in on the elusive liver stem **cell?**
Senior K.
Molecular Medicine Today (MOL. MED. TODAY) (United Kingdom) 2000, 6/4 (137)
CODEN: MMTOF ISSN: 1357-4310
DOCUMENT TYPE: Journal; Note
LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 4

Closing in on the elusive liver stem **cell?**
MEDICAL DESCRIPTORS:
cell maturation; bone marrow cell; liver injury; liver transplantation; gene therapy; cell differentiation; **donor** ; bone marrow transplantation; nonhuman; mouse; animal experiment; animal tissue; animal cell; note

11/3,K/26 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE

10543135 EMBASE No: 2000008374
Intrauterine transplantation of fetal liver stem **cells for the treatment of beta-thalassemia and immunodeficiency diseases**
Touraine J.-L.
J.-L. Touraine, Dept. of Transplant./Clin. Immunol., Claude Bernard University, Lyon France
Reviews in Clinical and Experimental Hematology (REV. CLIN. EXP. HEMATOL.) (United Kingdom) 1999, 8/1-4 (33-48)
CODEN: RCEHF ISSN: 1365-151X
DOCUMENT TYPE: Journal; Review
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 52

Intrauterine transplantation of fetal liver stem **cells for the treatment of beta-thalassemia and immunodeficiency diseases**

...the prenatal, in utero application of stem cell transplants to treat severe genetic disorders of the human fetus. Six patients have been transplanted with fetal **liver stem** cells. Recipient ages ranged from 12 to 28 weeks postfertilization, **donor** ages from 7 to 14 weeks postfertilization. The first patient had bare lymphocyte syndrome and the engraftment occurred readily resulting in a virtually full reconstitution ...

...various antigens is excellent. The second fetal patient also benefited from this treatment and was cured from severe combined immunodeficiency in 1989. She had 80% **donor** -derived lymphocytes, but unfortunately died one month ago following a **cadaver** liver transplant which was done to treat a sclerosing cholangitis. A third patient, without immunodeficiency, received the transplant at 12 weeks postfertilization, to treat beta0...

...Split chimerism and partial correction were obtained. Two other cases eventually resulted in severe fetal bradycardia and pregnancy discontinuation. A sixth patient had engraftment of **donor** cells, but only a marginal effect on her Niemann-Pick type A disease was seen, probably due to the blood-brain barrier. Despite full HLA mismatch, the fetuses treated in utero with stem cell transplants developed normal immunity and demonstrated immunological tolerance to **donor** and host antigens thanks to the 'selection' and 'education' processes of **donor** -derived lymphocytes within host thymus: tolerance to **donor** antigens resulted from clonal deletion and tolerance to host antigens from clonal anergy. The recent experience of other groups in the field of human in...

11/3,K/27 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE

07652331 EMBASE No: 1999139463
Haematopoietic stem cell emergence and development in the human embryo and fetus; perspectives for blood cell therapies in utero
Peault B.; Touraine J.-L.; Charbord P.
P. Charbord, Laboratoire d'Etude l'Hematopoiese, Etab. Transfus. Sang. Franche-Comte, 1 bd Alexander Fleming, Besancon France
AUTHOR EMAIL: pierre.charbord@univ-fcomte.fr

Seminars in Neonatology (SEMIN. NEONATOL.) (United Kingdom) 1999, 4/1 (55-66)
CODEN: SNEOF ISSN: 1084-2756
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH
NUMBER OF REFERENCES: 71

...more significant one being a higher cycling rate. The relative paucity of functional T cells during the second trimester, the considerable proliferative capacity of fetal **liver stem** cells and the lack of functional T cells in fetal stem cell harvests prompted some investigators to perform in utero transplantations during the second trimester using 7-14-week-old fetal **liver stem** cells. The procedure is not without risk of fetal death. However, clear-cut success has been obtained. Two children with complete correction of their initial...

...disease are alive and in good condition 9 and 10 years after in utero transplantation. Studies in vitro have confirmed the complete immunological tolerance between **donor** -derived T cells and host-derived B cells and monocycles, confirming the validity of the hypotheses at the basis of in utero grafting. Better understanding...
?

Set	Items	Description
S1	1545	(LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2	133	S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3	36096	(DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MINUTES)
S4	0	S2 AND S3
S5	1383	S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6	68433	(VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7	79	S5 AND S6
S8	7	S7 AND (LIVER OR HEPATIC)
S9	4	RD (unique items)
S10	56	S2 NOT PY>2000
S11	27	RD (unique items)
S12	101001	(HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
S13	7611	S12 (S) (HOURS OR MINUTES)
S14	0	S10 AND S13

?

```
S S6 AND S1
           68433  S6
            1545  S1
     S15       7  S6 AND S1
?

RD
     S16       5  RD  (unique items)
?

T S16/3,K/ALL
```

16/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

17533091 PMID: 15789767
[Isolation and prelimary characterization of a kind of rat liver

potential progenitor cells small round hepatic cells]
Yan Zhong Yu; An Wei; Wang Ping; Jia Ji Dong
Department of Cell Biology, Beijing 100054, China.
Shi yan sheng wu xue bao = Journal of experimental biology (China) Dec 2004, 37 (6) p475-81, ISSN 0001-5334 Journal Code: 0413570
Publishing Model Print
Document type: Journal Article
Languages: CHINESE
Main Citation Owner: NLM
Record type: In Process

Liver undergoes profound regeneration usually after hepatic damage. It has been shown in recent study that two kinds of **liver stem cells** , which are mainly oval **cells** (OVCs) and small hepatocytes, are involved in the process of liver regeneration as they differentiated into premature liver **cells** . However, the origination of oval **cells** as well as its differentiation property is not quite understood. In this study, we isolated a novel potential **liver progenitor cells** , namely small round **cells** (SRCs). The cellular features of the **cells** such as morphological appearance, surface marker, growth curve, and differentiation induced by DMSO were analyzed. SRCs and OVCs were obtained by using discontinuous digestions and...

... rich nucleolus visible. SRCs were semi-floated during primary culture. Even cultured in F12:DMEM (1:1) mixed-medium supplemented with 15% fetal calf serum, **viability** of the **cells** could merely be expanded over 7 days. SRCs were positively stained by CK19, ALB and AFP within initial 3 days. After DMSO stimulation, SRCs were...

16/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

13086209 PMID: 11059864
In vitro and in vivo suppression of growth of rat liver epithelial tumor cells by antisense oligonucleotide against protein kinase C-alpha.
Lin S B; Wu L C; Huang S L; Hsu H L; Hsieh S H; Chi C W; Au L C
School of Medical Technology, College of Medicine, National Taiwan University, Taipei, ROC.
Journal of hepatology (DENMARK) Oct 2000, 33 (4) p601-8, ISSN 0168-8278 Journal Code: 8503886
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

BACKGROUND/AIMS: It has been hypothesized that **liver stem cells** may be activated and proliferate upon liver injury and may participate in the development of liver cancer. GP7TB, a rat liver epithelial tumor cell line, possesses characteristics of **liver stem** -like **cells** and can develop into a tumor in syngeneic Fischer 344 rat. We found that protein kinase C-alpha (PKC-alpha) is overexpressed in GP7TB **cells** . The importance of PKC-alpha for this liver tumor cell was elucidated. METHODS: Antisense oligonucleotide (ODN) was applied to suppress the production of PKC-alpha in GP7TB **cells** in vitro and in vivo. Cell **viability** was measured by acid phosphatase assay. The cellular levels of PKC-alpha and Bcl-2 were monitored by Western-blot analysis. Activation of nuclear factor...

... RESULTS: Antisense ODN effectively suppressed the level of PKC-alpha that resulted in the decrease of Bcl-2 and nuclear NF-kappaB. The cumulative viable **cells** also decreased dramatically for the antisense-treated group. FACScan showed that the **cells** were arrested at early S-phase. These **cells** in turn went into apoptosis without completing a cell cycle. It was found that growth of the tumor was suppressed efficiently by antisense ODN. Cell apoptosis was found in the orthotopic tumor. The normal liver **cells** were not affected. CONCLUSIONS: A lethal effect of depressing the level of PKC-alpha in GP7TB **cells** and success in suppressing orthotopic tumor growth in vivo suggests that PKC-alpha antisense ODN would be a promising therapeutic agent for some liver cancers.

16/3,K/3 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0015572329 BIOSIS NO.: 200510266829
Expression of CXCR4 on intrahepatic stem cells from organ donors and patients with chronic liver disease
AUTHOR: Porretti Laura (Reprint); Lopa Raffaella; Gramignoli Roberto; Ambrosone Antonella; Mosca Annamaria; Cattaneo Alessandra; Scalamogna Mario; Gatti Stefano; Rossi Giorgio; Colli Agostino; Prati Daniele
AUTHOR ADDRESS: Osped Maggiore, IRCCS, Organ Procurement and Tissue Bank, Milan, Italy**Italy
JOURNAL: Blood 104 (11, Part 2): p131B NOV 16 2004 2004
CONFERENCE/MEETING: 46th Annual Meeting of the American-Society-of-Hematology San Diego, CA, USA December 04 -07, 2004; 20041204
SPONSOR: Amer Soc Hematol
ISSN: 0006-4971
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

ABSTRACT: Replication of mature hepatocytes can ensure hepatic tissue renewal in normal liver. However, in certain physiopathologic conditions, **cells** with stem-like properties can proliferate and/or be recruited from extra-hepatic compartments.For a better understanding of the mechanisms related to liver regeneration, more data on the morphological and differentiative profiles of **liver stem** cellsare needed. This study was aimed at the immunophenotypic characterization of circulating and intrahepatic stem **cells** in organ donors and in patients with chronic liver disease.We performed a four-colors flow cytometric evaluation of liver mononuclear cell suspensions (L-MNC) obtained after enzymatic digestion of liver biopsy specimens from 8 patients and 6 multi-organ donors. Paired peripheral blood mononuclear **cells** (PB-MNC) from the same subjects were also examined. L-MNC and PB-MNC were incubated with antibodies to the following markers: CD34, CD133, CD45, CD117 (c-kit) and CXCR4 (Stromal derived factor-1 receptor). Cell **viability** was performed using 7-aminoActinomycin D to exclude dead **cells** .In patients, the stem cell marker CD34 was detected on the surface of 0.6 +/- 0.9% of the L-MNC, a proportion similar to that observed in donors (0.6 +/- 0.5%). In both patients and donors, the majority of CD34+ **cells** co-expressed CD45 (86 +/- 9% and 60 +/- 31% respectively). The subset of CD34+/CD45- **cells** expressing c-kit was increased in L-MNC from patients as compared to donors (13.8+/- 12% vs.1.5 +/- 1% of the total CD34+ **cells** ; $p<0.05$ by Student t test), while it was scarcely represented or not detectable in PB-MNC. The proportion ofCD34+ **cells**

with a definite hematopoietic profile (CD45+/c-kit+) did not differ between patients and donors, both in L-MNC (50 +/- 32% vs. 57 +/- 13%) and in PB-MNC (66 +/- 20% vs. 45 +/- 23%). However, in the latter compartment we identified a subset of **cells** expressing both CD133 and CXCR4. This subset of CD34+ **cells** was more frequently found in diseased (74 +/- 25%) and normal liver (50 +/- 18%) as compared to peripheral blood from both patients and donors (24+/- 22% and 30 +/- 30% respectively), (p<0.01; paired-t test).Flow cytometry analysis of intrahepatic CD34+ stem **cells** allows the identification of at least two phenotipically distinct populations. The first populationco-expresses c-kit, is increased in the presence of chronic hepatocellular damage...
DESCRIPTORS:
...ORGANISMS: PARTS ETC: **liver** **stem** cell

16/3,K/4 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0014913669 BIOSIS NO.: 200400284426
Mouse fetal hepatocyte culture in 3-D artificial capillary beds in bioreactors
AUTHOR: Monga &&&N39; Satdarshan S (Reprint); Hout Mariah S; Micsenyi Amanda; Baun Matt J; Gerlach Joerg
AUTHOR ADDRESS: Pathology, University of Pittsburgh, S421-BST, 200 Lothrop Street, Pittsburgh, PA, 15261, USA**USA
AUTHOR E-MAIL ADDRESS: smonga@pitt.edu
JOURNAL: FASEB Journal 18 (4-5): pAbst. 144.7 2004 2004
MEDIUM: e-file
CONFERENCE/MEETING: FASEB Meeting on Experimental Biology: Translating the Genome Washington, District of Columbia, USA April 17-21, 2004; 20040417
SPONSOR: FASEB
ISSN: 0892-6638 _(ISSN print)
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: OLT. However longterm function has not been achieved. To address cell source issues, we investigate the culturing of mouse fetal hepatocytes in bioreactors. E17 liver **cells** were inoculated in the bioreactor & cultured for 21 days following which the tissue was fixed, paraffin embedded, sectioned & analyzed for histology, proliferation, apoptosis & differentiation. High glucose utilization & lactate production was observed since the culture set up indicating good cell growth & **viability** . Histology showed healthy hepatocytes of varying maturation within ribbon-like structures lined by flattened **cells** . High PCNA & Ki-67 positivity indicated robust cell proliferation. TUNEL staining displayed few apoptotic nuclei. **Cells** within ribbons were strongly albumin positive. α-FP, CK19 and c-kit positive **cells** were seen towards either edge of the ribbons indicating their stem cell lineage. Some aggregates of immature/progenitors or differentiated hepatocytes only were also seen. Thus we have successfully employed & cultured fetal hepatocytes in bioreactors maintaining their proliferation, survival & function. While differentiated hepatocytes impart function, a maintained dedifferentiated **hepatic** **progenitor** population provides a replenishing source instructing longevity to the cultures. ....

16/3,K/5 (Item 3 from file: 5)

DIALOG(R)File 5:Biosis Previews(R)

0014794630 BIOSIS NO.: 200400161971
Lack of evidence of sustained hematopoietic reconstitution after transplantation of unmanipulated adult liver stem **cells in nonhuman primates.**
AUTHOR: Herodin Francis (Reprint); Norol Francoise; Mayol Jean-Francois (Reprint); Franetich Jean-Francois; Grenier Nancy (Reprint); Mazier Dominique; Letoublon Christian; Drouet Michel (Reprint)
AUTHOR ADDRESS: Radiobiology, Centre de Recherches du Service de Sante des Armees, La Tronche, France**France
JOURNAL: Blood 102 (11): p154b November 16, 2003 2003
MEDIUM: print
CONFERENCE/MEETING: 45th Annual Meeting of the American Society of Hematology San Diego, CA, USA December 06-09, 2003; 20031206
SPONSOR: American Society of Hematology
ISSN: 0006-4971
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Abstract
LANGUAGE: English

Lack of evidence of sustained hematopoietic reconstitution after transplantation of unmanipulated adult liver stem **cells in nonhuman primates.**

ABSTRACT: Recent data confirm the presence of a hematopoietic potential in adult murine extramedullary pluripotent stem **cells** . This concept needs to be clarified in nonhuman primates that are relevant models to humans. The present study was focused on the search for hematopoietic potential in adult macaque liver in an autologous setting. Hepatic mononuclear **cells** (HMNC) were isolated after partial hepatectomy by perfusing liver samples with collagenase A in Hepes saline containing CaCl2. The cell suspension was passed through a...

...Hepatocytes and clumps were sedimented out and HMNC were prepared as a cell pellet obtained after centrifugation at 300g for 5 min. Cell count and **viability** was determined. HMNC were characterized for immature and hematopoietic markers using flow cytometry and clonogenic assays. Less than 1% of HMNC exhibited a SP phenotype after incubation with 15 mcg/mL (optimal concentration) of Hoechst 33342. Liver SP **cells** were CD45neg and about 30% expressed CD34 antigen; the higher the CD34 expression the greater the ability to efflux the dye. Low levels of clonogenic...

...month later, the animals were conditionned to 10 Gy 60Co gamma and transplanted the day after with thawed unmanipulated HMNC (respectively 112, 117 and 135X106 **cells**). Grafted animals displayed a transient neutrophil recovery from day 27 after transplantation (ANC higher than 1X109/L for 14 days on average) but no platelet...

...until euthanasia. This study suggests that although the concept of stem cell plasticity has been shown in primates, more research is needed to engineer stem **cells** as therapeutics.
DESCRIPTORS:
...ORGANISMS: PARTS ETC: **liver** **stem** cells
?

Set Items Description
S1 1545 (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)

```
S2         133   S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3       36096   (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MIN-
             UTES)
S4           0   S2 AND S3
S5        1383   S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6       68433   (VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7          79   S5 AND S6
S8           7   S7 AND (LIVER OR HEPATIC)
S9           4   RD  (unique items)
S10         56   S2 NOT PY>2000
S11         27   RD  (unique items)
S12     101001   (HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
S13       7611   S12 (S) (HOURS OR MINUTES)
S14          0   S10 AND S13
S15          7   S6 AND S1
S16          5   RD  (unique items)
?

S S6 AND (LIVER OR HEPATIC)
            68433  S6
          1635507  LIVER
           453820  HEPATIC
     S17    4675  S6 AND (LIVER OR HEPATIC)
?

S S17 AND (LOSS (W) OF (W) VIABILITY)
            4675  S17
           993746  LOSS
                0  OF
           158864  VIABILITY
                0  LOSS(W)OF(W)VIABILITY
     S18       0  S17 AND (LOSS (W) OF (W) VIABILITY)
?

S S17 AND HYPOXIA
            4675  S17
           159222  HYPOXIA
     S19     142  S17 AND HYPOXIA
?

S S17 AND (TRANSPLANT OR TRANSPLANTATION)
            4675  S17
           186766  TRANSPLANT
          1492676  TRANSPLANTATION
     S20     790  S17 AND (TRANSPLANT OR TRANSPLANTATION)
?


Set     Items   Description
S1       1545   (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2        133   S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3      36096   (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MIN-
             UTES)
S4          0   S2 AND S3
S5       1383   S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6      68433   (VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7         79   S5 AND S6
S8          7   S7 AND (LIVER OR HEPATIC)
S9          4   RD  (unique items)
S10        56   S2 NOT PY>2000
```

```
S11         27   RD  (unique items)
S12     101001   (HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
S13       7611   S12 (S) (HOURS OR MINUTES)
S14          0   S10 AND S13
S15          7   S6 AND S1
S16          5   RD  (unique items)
S17       4675   S6 AND (LIVER OR HEPATIC)
S18          0   S17 AND (LOSS (W) OF (W) VIABILITY)
S19        142   S17 AND HYPOXIA
S20        790   S17 AND (TRANSPLANT OR TRANSPLANTATION)
?

S S19 AND (HOURS OR MINUTES)
             142  S19
          545605  HOURS
          277840  MINUTES
     S21      30  S19 AND (HOURS OR MINUTES)
?

RD
     S22      18  RD  (unique items)
?

S S22 NOT PY>2000
              18  S22
         7838014  PY>2000
     S23      16  S22 NOT PY>2000
?

T S23/3,K/ALL

  23/3,K/1     (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.

12691641   PMID: 10613741
  Role of oxidative stress in hypoxia -reoxygenation injury to cultured
 rat  hepatic  sinusoidal endothelial cells.
  Samarasinghe D A; Tapner M; Farrell G C
  Storr Liver Unit, University of Sydney at Westmead Hospital, Westmead,
Australia.
  Hepatology (Baltimore, Md.) (UNITED STATES)  Jan 2000,  31  (1)  p160-5,
ISSN 0270-9139   Journal Code: 8302946
  Publishing Model Print
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: MEDLINE; Completed

  Role of oxidative stress in hypoxia -reoxygenation injury to cultured
 rat  hepatic  sinusoidal endothelial cells.
  To characterize the role of oxidative stress in cultured rat sinusoidal
endothelial cells , we studied the production of superoxide after
reoxygenation, the relationship of reduced glutathione (GSH) levels to cell
injury, and the protective efficacy of antioxidants. Hypoxia (pO(2) 1-2
mm Hg) was achieved by culturing cells under 95% N(2)5% CO(2) for 4
  hours . Reoxygenation was then reestablished, and viability was
determined at 24 hours by trypan blue exclusion; putative protective
agents were added at the time of reoxygenation (4 hours ). As previously
reported, reoxygenation after 4 hours  hypoxia accentuated sinusoidal
```

cell death fourfold compared with hypoxic or normoxic controls (P <.0001). Superoxide was not produced on reoxygenation, and superoxide dismutase provided no protection...

... both of which also completely protected against reoxygenation injury. When cellular GSH levels were lowered by addition of diethylmaleate (which conjugates GSH), this reduced the **viability** of endothelial **cells** cultured under normoxic conditions and greatly augmented reoxygenation injury. Conversely, addition of exogenous GSH partially protected endothelial **cells** against **hypoxia** -reoxygenation injury. Desferrioxamine also protected against reoxygenation injury, but catalase was only partly protective. It is concluded that sinusoidal endothelial **cells** undergo significant intracellular oxidative stress following reoxygenation, and their **viability** is critically dependent on GSH levels. Reactive oxygen species are likely mediators of oxidative stress in **hepatic** sinusoidal endothelial **cells** .

Descriptors: *Cell Death; *Cell **Hypoxia** ; *Endothelium, Vascular --cytology--CY; *Glutathione--metabolism--ME; * **Liver** --blood supply--BS; *Oxidative Stress; *Oxygen--administration and dosage--AD

23/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

12227841 PMID: 9537444

Mitochondrial dysfunction and cytoskeletal disruption during chemical hypoxia to cultured rat hepatic sinusoidal endothelial cells: the pH paradox and cytoprotection by glucose, acidotic pH, and glycine.

Nishimura Y; Romer L H; Lemasters J J
Department of Cell Biology and Anatomy, University of North Carolina at Chapel Hill, 27599-7090, USA.

Hepatology (Baltimore, Md.) (UNITED STATES) Apr 1998, 27 (4) p1039-49, ISSN 0270-9139 Journal Code: 8302946
Contract/Grant No.: DK-34978; DK; NIDDK; DK-37034; DK; NIDDK; HL-03299; HL; NHLBI
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Mitochondrial dysfunction and cytoskeletal disruption during chemical hypoxia to cultured rat hepatic sinusoidal endothelial cells: the pH paradox and cytoprotection by glucose, acidotic pH, and glycine.

We investigated mechanisms underlying death of cultured rat **liver** sinusoidal endothelial **cells** exposed to chemical **hypoxia** with KCN (2.5 mmol/L) to simulate the adenosine triphosphate (ATP) depletion and reductive stress of anoxia. During chemical **hypoxia** , acidotic pH prevented cell death. Glucose (0.3-10 mmol/L) also prevented cell killing. Cytoprotection by glucose but not acidosis was associated with prevention of ATP depletion. After 4 **hours** of chemical **hypoxia** at pH 6.2 (simulated ischemia), rapid cell death occurred when pH was restored to pH 7.4 with or without washout of KCN (simulated...

... pH and glycine during simulated reperfusion was lost when pH was later restored to 7.4 or glycine was subsequently removed. Mitochondria depolarized during chemical **hypoxia** . After washout of cyanide, mitochondrial membrane potential (delta psi) did not recover in **cells** that subsequently lost **viability** . Conversely, those **cells** that

repolarized after cyanide washout did not subsequently lose **viability** . The actin cytoskeleton and focal adhesions became severely disrupted during chemical **hypoxia** at both pH 6.2 and 7.4 and did not recover after cyanide washout under any condition. Glucose during chemical **hypoxia** prevented cytoskeletal disruption. In conclusion, endothelial cell damage during simulated ischemia/reperfusion involves mitochondrial dysfunction, ATP depletion, and ATP-dependent cytoskeletal disruption. Glycine and acidotic ...

Descriptors: *Cytoprotection; *Cytoskeleton--physiology--PH; *Endothelium, Vascular--cytology--CY; *Glucose--pharmacology--PD; *Glycine --pharmacology--PD; *Mitochondria, **Liver** --physiology--PH; Adenosine Triphosphate--metabolism--ME; Animals; Cell **Hypoxia** ; Cells, Cultured; Cyclosporine--pharmacology--PD; Hydrogen-Ion Concentration; Membrane Potentials; Rats; Rats, Sprague-Dawley; Reperfusion Injury--prevention and control--PC

23/3,K/3 (Item 3 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11966963 PMID: 9252145
Oxygen-free radical-mediated injury to cultured rat hepatocytes during cold incubation in preservation solutions.
Rauen U; Reuters I; Fuchs A; de Groot H
Institut fur Physiologische Chemie, Universitatsklinikum, Essen, Germany.
Hepatology (Baltimore, Md.) (UNITED STATES) Aug 1997, 26 (2) p351-7, ISSN 0270-9139 Journal Code: 8302946
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

We have previously shown that the injury to cultured **liver** endothelial **cells** during cold incubation in University of Wisconsin (UW) solution is energy-dependent and is mediated by reactive oxygen species. Here we demonstrate that this reactive oxygen-mediated injury is specific neither to endothelial **cells** nor to UW solution: cultured hepatocytes incubated in cold (4 degrees C) UW solution or histidine-tryptophan-ketoglutarate (HTK) solution were injured under normoxic conditions (loss of **viability** , 63% +/- 10% after 48 **hours** of cold incubation in UW solution and 82% +/- 11% after 24 **hours** of cold incubation in HTK solution), whereas **hypoxia** was protective (loss of **viability** , 29% +/- 12% [UW] and 13% +/- 3% [HTK] after the same cold incubation times). The injury under normoxic conditions was also largely decreased by adding either the spin trap 5,5-dimethyl-1-pyrroline N-oxide (DMPO) or the flavonoid silibinin to the solutions, or by preincubating the **cells** with the iron chelator deferoxamine before the hypothermic incubation. Marked lipid peroxidation was observed during cold incubation in both preservation solutions. These results suggest that the injury to cultured hepatocytes during cold incubation in UW and HTK solutions is mediated by reactive oxygen species as is the injury to cultured **liver** endothelial **cells** .
Descriptors: ***Liver** --pathology--PA; *Reactive Oxygen Species --metabolism--ME

23/3,K/4 (Item 4 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11722228 PMID: 9346569
Energy status in anoxic rat hepatocytes: effects of isoflurane, solution composition, and hypothermia.
Howard B J; Pohorecki R; Becker G L; Landers D F
Department of Anesthesiology, University of Nebraska Medical Center, Omaha 68198-4455, USA.
Liver transplantation and surgery - official publication of the American Association for the Study of Liver Diseases and the International Liver Transplantation Society (UNITED STATES) Jul 1995, 1 (4) p220-4, ISSN 1074-3022 Journal Code: 9502504
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Both cold and warm ischemia occur during **liver** transplantation. Hypothermia and Wisconsin solution preserve adenine nucleotide energy status, which is crucial to **hepatic** function and **viability** . The volatile anesthetic isoflurane has been shown to preserve energy status in anoxic isolated hepatocytes in warm Krebs solution. The present study examined isoflurane effects on energy status during incubation also in Wisconsin or Krebs-plus-adenosine solution at 37 degrees or 4 degrees. Hepatocytes were isolated from rat **liver** after perfusion with Krebs + collagenase. In 25-mL flasks, 12.5 million **cells** in 2.5 mL of Krebs, Krebs plus 5 mmol/L adenosine, or Wisconsin solution were incubated under an atmosphere of O2/CO2 or N2/CO2 (19:1) +/- isoflurane (3 volumes% = 2ED50), for 30 **minutes** at 37 degrees C or 4 degrees C. Adenine nucleotides were measured by high-performance liquid chromatography (HPLC), lactate enzymatically. During warm (37 degrees) anoxia...

... greatly decreased anoxic loss of energy status in all solutions. In Wisconsin solution only, energy status tended to be higher in anoxic than in oxygenated **cells** and was further enhanced by isoflurane, with corresponding increases in lactate. During 30 **minutes** of either warm or cold anoxia, isoflurane and Wisconsin solution each helped preserve adenine nucleotide energy status in isolated hepatocytes, at least in part through ...
Descriptors: *Anesthetics, Inhalation--pharmacology--PD; *Anoxia --metabolism--ME; *Hypothermia, Induced--methods--MT; *Isoflurane --pharmacology--PD; *Isotonic Solutions--pharmacology--PD; * **Liver** --metabolism--ME; Adenine Nucleotides--metabolism--ME; Adenosine --pharmacology--PD; Allopurinol--pharmacology--PD; Animals; Anoxia --pathology--PA; Anoxia--prevention and control--PC; Cell **Hypoxia** --drug effects--DE; Cell **Hypoxia** --physiology--PH; Chromatography, High Pressure Liquid; Disease Models, Animal; Energy Metabolism--drug effects--DE; Glutathione--pharmacology--PD; Insulin--pharmacology--PD; **Liver** --drug effects--DE; **Liver** --pathology--PA; Raffinose--pharmacology--PD; Rats; Rats, Sprague-Dawley

23/3,K/5 (Item 5 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11593865 PMID: 8903403
The central role of sinusoidal endothelial cells in hepatic hypoxia **-reoxygenation injury in the rat.**
Samarasinghe D A; Farrell G C

Storr Liver Unit, University of Sydney at Westmead Hospital, New South Wales, Australia.
Hepatology (Baltimore, Md.) (UNITED STATES) Nov 1996, 24 (5) p1230-7, ISSN 0270-9139 Journal Code: 8302946
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

The central role of sinusoidal endothelial cells in hepatic hypoxia **-reoxygenation injury in the rat.**

The role of individual cell types in **hepatic hypoxia** -reoxygenation (reperfusion) injury has not been completely defined. We therefore examined the effects of **hypoxia** and **hypoxia** -reoxygenation on the□viability□of rat hepatocytes, Kupffer **cells** , and sinusoidal endothelial **cells** (SECs) in primary culture and whether direct exposure to **hypoxia** followed by reoxygenation activated Kupffer **cells** . Cultures of hepatocytes (purity > 99%), Kupffer **cells** (97%), and endothelial **cells** (> 93%) were established as single-cell types and as cocultures. **Hypoxia** was achieved by culturing **cells** under 95% N2/5% CO2, and cell **viability** was estimated by lactate dehydrogenase (LDH) leakage and Trypan blue exclusion. Kupffer **cells** and endothelial **cells** were more resistant to□hypoxia□ than hepatocytes. Following 4-8 **hours** of **hypoxia** , reoxygenation accentuated cell death in endothelial **cells** . In contrast, reoxygenation did not accentuate cell death in hepatocytes or in resting Kupffer **cells** . The activation of Kupffer **cells** by the addition of lipopolysaccharide failed to alter their response to **hypoxia** -reoxygenation. The addition of phorbol myristate acetate to Kupffer **cells** stimulated the production of superoxide as expected, and the medium from these activated **cells** augmented the cellular injury of hypoxic hepatocytes. In contrast, **hypoxia** -reoxygenation did not stimulate Kupffer **cells** to produce superoxide or other hepatotoxic products. Moreover, Kupffer **cells** in coculture with hepatocytes did not augment hepatocyte injury after **hypoxia** -reoxygenation. Likewise, in cocultures of Kupffer **cells** and SECs, the presence of the Kupffer cell failed to enhance endothelial injury following **hypoxia** -reoxygenation, and these cocultures did not produce superoxide after reoxygenation. Thus, despite other evidence that Kupffer **cells** are activated in the intact **liver** during reperfusion injury, when present in isolation, only endothelial **cells** possess the innate capacity to undergo **hypoxia** -reoxygenation injury. Furthermore, changes in oxygen tension alone are not sufficient to activate Kupffer **cells** to secrete superoxides or other cell products that are toxic to hepatocytes or endothelial **cells** . It is concluded that SECs play a central role in **hypoxia** -reoxygenation injury, and the factors that activate Kupffer **cells** in vivo require further study.

Descriptors: *Endothelium, Vascular--cytology--CY; * **Liver** --cytology--CY; * **Liver** --metabolism--ME; *Reperfusion Injury--etiology--ET; Animals; Cell **Hypoxia** ; Cells, Cultured; Coculture Techniques; Kupffer Cells --metabolism--ME; Lipopolysaccharides--pharmacology--PD; Rats; Rats, Wistar ; Superoxides--metabolism--ME

23/3,K/6 (Item 6 from file: 155)

10359347 PMID: 8238374
Oxygen conformance of cellular respiration in hepatocytes.
Schumacker P T; Chandel N; Agusti A G

Department of Medicine, University of Chicago, Illinois 60637.
American journal of physiology (UNITED STATES) Oct 1993, 265 (4 Pt 1) pL395-402, ISSN 0002-9513 Journal Code: 0370511
Contract/Grant No.: HL-32646; HL; NHLBI; HL-35440; HL; NHLBI; TW-02486; TW; FIC
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... falling O2 availability might confer an increased resistance to a diminished O2 supply. Isolated rat hepatocytes were studied in primary culture under controlled O2 tensions. **Cells** were obtained by collagenase digestion and seeded into nutritive media in control and experimental spinner flasks at identical cell densities. **Cells** subjected to rapid reduction in PO2 (100-->0 Torr over < 40 min) exhibited undiminished O2 uptake until PO2 fell below 10 Torr. By contrast, when cell PO2 was reduced over several **hours** , significant decreases in O2 uptake became evident at O2 tensions as high as 70 Torr. These decreases were associated with a reduction in ATP concentration and an increase in NAD(P)H, compared with rapidly deoxygenated **cells** at the same PO2. No loss in cell **viability** was detected after 24 h at reduced PO2. The decrease in respiratory rate was associated with an increased rate of lactic acid production relative to ...

... mechanism that appears to involve an inhibition of mitochondrial function other than O2 supply limitation. This response may alter cellular susceptibility to physiological stresses including **hypoxia** .

Descriptors: ***Liver** --metabolism--ME; *Oxygen Consumption; Adenosine Triphosphate--metabolism--ME; Adenosine Triphosphate--physiology--PH; Animals; Cell Separation; Cycloheximide--pharmacology--PD; **Liver** --cytology--CY; NADP--metabolism--ME; Oxygen--metabolism--ME; Partial Pressure; Potassium Channels--physiology--PH; Protein Biosynthesis; Rats; Time Factors

23/3,K/7 (Item 7 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

09757433 PMID: 1575684

Late steady increase in cytosolic Ca2+ preceding hypoxic injury in hepatocytes.

Brecht M; Brecht C; De Groot H
Klinische Forschergruppe Leberschadigung, Heinrich-Heine-Universitat Dusseldorf, Federal Republic of Germany.

Biochemical journal (ENGLAND) Apr 15 1992, 283 (Pt 2) p399-402, ISSN 0264-6021 Journal Code: 2984726R
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Upon initiation of **hypoxia** , the ATP content of hepatocytes in monolayer cultures fell within 5 min from 22 to 12 nmol of ATP/10(6) **cells** . This decrease in ATP was not followed by early alterations in the cytosolic Ca2+ concentration; for up to 60 min it remained around 100 nM. However, after the period cytosolic free Ca2+ steadily increased, up to 400 nM. This

increase began around 60 min before the **cells** lost their **viability** , and primarily resulted from an influx of extracellular Ca2+. Likewise, in experiments where the mitochondrial respiratory chain was blocked by KCN and glycolysis was blocked by iodoacetate, the ATP content fell within **minutes** to 10 nmol/10(6) **cells** , whereas the cytosolic Ca2+ concentration only began to increase 30 min later (up to 600 nM). However, also under these conditions of 'chemical **hypoxia** ' this increase was clearly (about 10 min) earlier than the loss of **viability** .

Descriptors: *Calcium--metabolism--ME; *Cell **Hypoxia** --physiology--PH; * **Liver** --metabolism--ME...; Triphosphate--metabolism--ME; Animals; Cell Survival; Cells, Cultured; Cytosol--metabolism--ME; Egtazic Acid --pharmacology--PD; Glycolysis--drug effects--DE; Iodoacetates --pharmacology--PD; Iodoacetic Acid; Kinetics; **Liver** --cytology--CY; **Liver** --drug effects--DE; Oxidative Phosphorylation--drug effects--DE; Potassium Cyanide--pharmacology--PD; Rats; Rats, Inbred Strains; Time Factors

23/3,K/8 (Item 8 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.

09547344 PMID: 1656773
O2-. release by activated Kupffer cells upon hypoxia **-reoxygenation.**
Rymsa B; Wang J F; de Groot H
Klinische Forschergruppe Leberschadigung, Institut fur Physiologische Chemie I, Heinrich-Heine-Universitat, Dusseldorf, Federal Republic of Germany.
American journal of physiology (UNITED STATES) Oct 1991, 261 (4 Pt 1) pG602-7, ISSN 0002-9513 Journal Code: 0370511
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

O2-. release by activated Kupffer cells upon hypoxia **-reoxygenation.**
Primary cultures of rat **liver** Kupffer **cells** generated large amounts of superoxide anion radical (O2-.) when subjected to reoxygenation after a hypoxic period of at least 2 h. O2-. formation reached its maximum rate of approximately 25 nmol/10(6) **cells** within 1 h after reoxygenation. Two to four **hours** after reoxygenation, the number of injured **cells** began to increase and after 10 h approximately 60% of the **cells** were dead. During the period of O2-. release no significant difference in cell **viability** was observed between reoxygenated and hypoxically incubated **cells** , indicating a distinct time lag between O2-. release and onset of cell damage. Addition of diphenyliodonium, a specific inhibitor of the neutrophilic NADPH oxidase, to the Kupffer **cells** just before reoxygenation diminished both O2-. formation and cell injury up to 70%. Reoxygenation injury was completely prevented when superoxide dismutase and catalase were added immediately before reoxygenation. The results indicate that Kupffer **cells** subjected to **hypoxia** -reoxygenation generate a burst of reactive oxygen species and that this kind of "activation," probably by activating the NADPH oxidase, contributes to the self-destruction of the **cells** .

23/3,K/9 (Item 9 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2005 Dialog. All rts. reserv.

09046054 PMID: 2639627
Assessment of the viability **of haemopoietic** cells□in the livers of□ **mouse fetuses stored at 4 degrees C. Comparison of various methods of testing their usefulness for haemopoietic transplantation.**
Ratajczak M Z; Szczylik C; Berger L
Department of Immunology CSK WAM, Warszawa.
Archivum immunologiae et therapiae experimentalis (POLAND) 1989, 37 (3-4) p269-76, ISSN 0004-069X Journal Code: 0114365
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Assessment of the viability **of haemopoietic** cells□in the livers of□ **mouse fetuses stored at 4 degrees C. Comparison of various methods of testing their usefulness for haemopoietic transplantation.**
The usefulness of three different tests available in experimental haematology for the assessment of the **viability** of fetal **liver cells** obtained from murine fetuses kept in refrigerator at 4 degrees C was compared. The usefulness of these **cells** as potential transplants for haemopoiesis reconstitution was assessed in the test with trypan blue, in the test based on clonal growth of GM-CFU in agar, and in the test of the splenic colony forming ability of CFU-S. Fetuses kept in refrigerator at 4 degrees C tested 16 **hours** after circulation arrest contained still about 70% of the initial number of the haemopoietic stem **cells** (CFU-S). The proportion of committed **cells** belonging to the granulocyto-monopoiesis line (GM-CFU) decreased at the same time to about 25% of the initial number, and was a sensitive indicator of **hypoxia** of the studied organ. The test for the **viability** of the **cells** based on the use of trypan blue gave results reflecting better the changes in the number of CFU-S than GM-CFU **cells** .
Descriptors: *Bone Marrow Transplantation; *Cryopreservation; *Fetus --cytology--CY; *Hematopoietic Stem Cells--cytology--CY; * **Liver** --cytology --CY; *Tissue Preservation; Animals; **Liver** --embryology--EM; Mice; Time Factors

23/3,K/10 (Item 10 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08564840 PMID: 2707381
Interaction of hypoxia **and carbon tetrachloride toxicity in hepatocyte monolayers.**
Costa A K; Trudell J R
Department of Anesthesia, Stanford University School of Medicine, California 94305-5117.
Experimental and molecular pathology (UNITED STATES) Apr 1989, 50 (2) p183-92, ISSN 0014-4800 Journal Code: 0370711
Contract/Grant No.: OH 00978; OH; NIOSH
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Interaction of hypoxia **and carbon tetrachloride toxicity in hepatocyte monolayers.**

The toxicity of carbon tetrachloride (CCl4) in monolayer cultures of primary hepatocytes was investigated at oxygen concentrations that prevail in the **liver** under conditions that range from normoxia to **hypoxia** : 0.5, 1, 2, and 20% O2. CCl4 was administered in the vapor phase at concentrations that produce aqueous concentrations at 37 degrees C of...

... in the case of 0.5% O2 and 4 mM CCl4 were the monolayers damaged (18%) immediately after the 2-hr exposure; all other exposed **cells** were undamaged at that time point and the dose response of cell death as a function of CCl4 and oxygen concentration was not evident until...

... after 6 hr, respectively. These results suggest that effects of CCl4 exposure, for example alterations in the function or synthesis of essential proteins, require several **hours** to affect cell **viability** .

Descriptors: *Anoxia--metabolism--ME; *Carbon Tetrachloride--toxicity--TO ; * **Liver** --pathology--PA; Animals; Anoxia--physiopathology--PP; Carbon Tetrachloride--pharmacology--PD; Cell Survival--drug effects--DE; Cells, Cultured; Dose-Response Relationship, Drug; **Liver** --drug effects--DE; **Liver** --metabolism--ME; Oxygen--metabolism--ME; Oxygen--pharmacology--PD; Oxygen--physiology--PH; Rats; Rats, Inbred F344; Time Factors

23/3,K/11 (Item 11 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08493164 PMID: 3224370
Calcium dependence of bleb formation and cell death in hepatocytes.
Nieminen A L; Gores G J; Wray B E; Tanaka Y; Herman B; Lemasters J J
Department of Cell Biology & Anatomy, School of Medicine, University of North Carolina at Chapel Hill.
Cell calcium (SCOTLAND) Dec 1988, 9 (5-6) p237-46, ISSN 0143-4160 Journal Code: 8006226
Contract/Grant No.: AG07218; AG; NIA; DK30874; DK; NIDDK; HL35490; HL; NHLBI
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Calcium dependence of bleb formation and cell death was evaluated in rat hepatocytes following ATP depletion by metabolic inhibition with KCN and iodoacetate ('chemical **hypoxia** '). Cytosolic free Ca2+ was measured in single **cells** by ratio imaging of Fura-2 fluorescence using multiparameter digitized video microscopy. **Cells** formed surface blebs within 10 to 20 **minutes** after chemical **hypoxia** and most□cells□lost□viability□within an hour. An increase of cytosolic free Ca2+ was not required for bleb formation to occur. One to a few **minutes** prior to the onset of cell death, free Ca2+ increased rapidly in high Ca2+ buffer (1.2 mM) but not in low Ca2+ buffer (less...

...was the same. As the onset of cell death was approached in both high and low Ca2+ buffers, Fura-2 began to leak from the **cells** at an accelerating rate indicating rapidly increasing plasma membrane permeability. In high Ca2+ buffer, cytosolic free Ca2+ increased in parallel with dye leakage. No regional...

Descriptors: *Calcium--pharmacology--PD; * **Liver** --cytology--CY; Aged; Animals; Calcium--analysis--AN; Cell Membrane--drug effects--DE; Cell Membrane--ultrastructure--UL; Cell Survival--drug effects--DE; Cytosol

--analysis--AN; Humans; **Liver** --pathology--PA; **Liver** --ultrastructure --UL; Microscopy, Electron, Scanning; Rats; Rats, Inbred Strains

23/3,K/12 (Item 12 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

08468572 PMID: 2536397
Intracellular pH during "chemical hypoxia " **in cultured rat hepatocytes. Protection by intracellular acidosis against the onset of cell death.**
Gores G J; Nieminen A L; Wray B E; Herman B; Lemasters J J
Department of Cell Biology & Anatomy, School of Medicine, University of North Carolina, Chapel Hill 27599.
Journal of clinical investigation (UNITED STATES) Feb 1989, 83 (2) p386-96, ISSN 0021-9738 Journal Code: 7802877
Contract/Grant No.: AG-07218; AG; NIA; DK-30874; DK; NIDDK; HL-35490; HL; NHLBI
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

Intracellular pH during "chemical hypoxia " **in cultured rat hepatocytes. Protection by intracellular acidosis against the onset of cell death.**
The relationships between extracellular pH (pHo), intracellular pH (pHi), and loss of cell **viability** were evaluated in cultured rat hepatocytes after ATP depletion by metabolic inhibition with KCN and iodoacetate (chemical **hypoxia**). pHi was measured in single **cells** by ratio imaging of 2',7'-biscarboxy-ethyl-5,6-carboxyfluorescein (BCECF) fluorescence using multiparameter digitized video microscopy. During chemical **hypoxia** at pHo of 7.4, pHi decreased from 7.36 to 6.33 within 10 min. pHi remained at 6.1-6.5 for 30-40 min (plateau phase). Thereafter, pHi began to rise and cell death ensued within **minutes** , as evidenced by nuclear staining with propidium iodide and coincident leakage of BCECF from the cytoplasm. An acidic pHo produced a slightly greater drop in...
Descriptors: *Acidosis--metabolism--ME; **Liver** --metabolism--ME; *Oxygen

23/3,K/13 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0008159551 BIOSIS NO.: 199293002442
OXYGEN RADICAL RELEASE BY ACTIVATED KUPFFER CELLS UPON HYPOXIA **-REOXYGENATION**
AUTHOR: RYMSA B (Reprint); WANG J-F; DE GROOT H
AUTHOR ADDRESS: KLINISCHE FORSCHERGRUPPE LEBERSCHAEDIGUNG, INSTITUT PHYSIOLOGISCHE CHEMIE I, HEINRICH-HEINE-UNIVERSITAET, 4000 DUESSELDORF, GER**GERMANY
JOURNAL: American Journal of Physiology 261 (4 PART 1): pG602-G607 1991
ISSN: 0002-9513
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

OXYGEN RADICAL RELEASE BY ACTIVATED KUPFFER CELLS UPON HYPOXIA **-REOXYGENATION**

ABSTRACT: Primary cultures of rat **liver** Kupffer **cells** generated large amounts of superoxide anion radical (O2-.cntdot.) when subjected to reoxygenation after a hypoxic period of at least 2 h. O2-.cntdot. formation reached its maximum rate of .apprx.25 nmol/106 **cells** within 1 h after reoxygenation. Two to four **hours** after reoxygenation, the number of injured **cells** began to increase and after 10 h .apprx.60% of the **cells** were dead. During the period of O2-.cntdot. release no significant difference in cell **viability** was observed between reoxygenated and hypoxically incubated **cells** , indicating a distinct time lag between O2-.cntdot. release and onset of cell damage. Addition of diphenyliodonium, a specific inhibitor of the neutrophilic NADPH oxidase, to the Kupffer **cells** just before reoxygenation diminished both O2-.cntdot. formation and cell injury up to 70%. Reoxygenation injury was completely prevented when superoxide dismutase and catalase were added immediately before reoxygenation. The results indicate that Kupffer **cells** subjected to **hypoxia** -reoxygenation generate a burst of reactive oxygen species and that this kind of "activation," probably by activating the NADPH oxidase, contributes to the self-destruction of the **cells** .

23/3,K/14 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0007274105 BIOSIS NO.: 199090058584
ASSESSMENT OF THE VIABILITY **OF HEMOPOIETIC** CELLS□IN THE LIVERS OF MOUSE□ **FETUSES STORED AT 4 C COMPARISON OF VARIOUS METHODS OF TESTING THEIR USEFULNESS FOR HEMOPOIETIC TRANSPLANTATION**
AUTHOR: RATAJCZAK M Z (Reprint); SZCZYLIK C; BERGER L
AUTHOR ADDRESS: DEP IMMUNOLOGY CSK WAM, SZASEROW 128, 00-909 WARSZAWA** POLAND
JOURNAL: Archivum Immunologiae et Therapiae Experimentalis 37 (3-4): p 269-276 1989
ISSN: 0004-069X
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: ENGLISH

ASSESSMENT OF THE VIABILITY **OF HEMOPOIETIC** CELLS□IN THE LIVERS OF MOUSE□ **FETUSES STORED AT 4 C COMPARISON OF VARIOUS METHODS OF TESTING THEIR USEFULNESS FOR HEMOPOIETIC TRANSPLANTATION**

ABSTRACT: The usefulness of three different tests available in experimental haematology for the assessment of the **viability** of fetal **liver** **cells** obtained from murine fetuses kept in refrigerator at 4.degree. C was compared. The usefulness of these **cells** as potential transplants for haemopoiesis reconstitution was assessed in the tests with trypan blue, in the test based on clonal growth of GM-CFU in agar, and in the test of the splenic colony forming ability of CFU-S. Fetuses kept in refrigerator at 4.degree. C tested 16 **hours** after circulation arrest contained still about 70% of the initial number of the haemopoietic stem **cells** (CFU-S). The proportion of committed **cells** belonging to the graulocytomonopoiesis line (GM-CFU) decreased at the same time to about 25% of the initial number, and was a sensitive indicator of **hypoxia** of the studied organ. The test for the **viability** of the **cells** based on the use of trypan blue gave results reflecting better the changes in the number of CFU-S than GM-CFU **cells** .

23/3,K/15 (Item 1 from file: 73)

DIALOG(R)File 73:EMBASE

04995868 EMBASE No: 1992136084
Late steady increase in cytosolic Casup 2sup + preceding hypoxic injury in hepatocytes
Brecht M.; Brecht C.; De Groot H.
Klin Forschergruppe Leberschad, Inst.fur Physiologische Chemie, Heinrich-Heine-Univ.Dusseldorf, Moorenstrasse 5,W-4000 Dusseldorf Germany
Biochemical Journal (BIOCHEM. J.) (United Kingdom) 1992, 283/2 (399-402)
CODEN: BIJOA ISSN: 0264-6021
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Upon initiation of **hypoxia** , the ATP content of hepatocytes in monolayer cultures fell within 5 min from 22 to 12 nmol or ATP/10sup 6 **cells** . This decrease in ATP was not followed by early alterations in the cytosolic Casup 2sup + concentration; for up to 60 min it remained around 100 nM. However, after that period cytosolic free Casup 2sup + steadily increased, up to 400 nM. This increase began around 60 min before the **cells** lost their **viability** , and primarily resulted from an influx of extracellular Casup 2sup +. Likewise, in experiments where the mitochondrial respiratory chain was blocked by KCN and glycolysis was blocked by iodoacetate, the ATP content fell within **minutes** to 10 nmol/10sup 8 **cells** , whereas the cytosolic Casup 2sup + concentration only began to increase 30 min later (up to 600 nM). However, also under these conditions of 'chemical **hypoxia** ' this increase was clearly (about 10 min) earlier than the loss of **viability** .
MEDICAL DESCRIPTORS:
*calcium cell level; *cell damage; *cell viability; *hypoxic cell--etiology --et; * **liver** cell

23/3,K/16 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE

04841933 EMBASE No: 1991336669
Oinf 2sup -- release by activated Kupffer cells upon hypoxia **-reoxygenation**
Rymsa B.; Wang J.-F.; De Groot H.
Klin. Forschergr. Leberschad., Inst. Physiologische Chemie I, Heinrich-Heine-Universitat,4000 Dusseldorf Germany
American Journal of Physiology - Gastrointestinal and Liver Physiology (AM. J. PHYSIOL. GASTROINTEST. LIVER PHYSIOL.) (United States) 1991, 261/4 24-4 (G602-G607)
CODEN: APGPD ISSN: 0002-9513
DOCUMENT TYPE: Journal; Article
LANGUAGE: ENGLISH SUMMARY LANGUAGE: ENGLISH

Oinf 2sup -- release by activated Kupffer cells upon hypoxia **-reoxygenation**

Primary cultures of rat **liver** Kupffer **cells** generated large amounts of superoxide anion radical (Oinf 2sup --) when subjected to reoxygenation after a hypoxic period of at least 2 h. Oinf 2sup -- formation reached its maximum rate of ~25 nmol/10sup 6 **cells** within 1 h after reoxygenation. Two to four **hours** after reoxygenation, the number of injured **cells**

began to increase and after 10 h ~60% of the **cells** were dead. During the period of Oinf 2sup -- release no significant difference in cell **viability** was observed between reoxygenated and hypoxically incubated **cells** , indicating a distinct time lag between Oinf 2sup - - release and onset of cell damage. Addition of diphenyliodonium, a specific inhibitor of the neutrophilic NADPH oxidase, to the Kupffer **cells** just before reoxygenation diminished both Oinf 2sup -- formation and cell injury up to 70%. Reoxygenation injury was completely prevented when superoxide dismutase and catalase were added immediately before reoxygenation. The results indicate that Kupffer **cells** subjected to **hypoxia** -reoxygenation generate a burst of reactive oxygen species and that this kind of 'activation,' probably by activating the NADPH oxidase, contributes to the self-destruction of the **cells** .
MEDICAL DESCRIPTORS:
* **hypoxia** ; *kupffer cell; *reoxygenation
?

Set	Items	Description
S1	1545	(LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2	133	S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3	36096	(DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MINUTES)
S4	0	S2 AND S3
S5	1383	S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6	68433	(VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7	79	S5 AND S6
S8	7	S7 AND (LIVER OR HEPATIC)
S9	4	RD (unique items)
S10	56	S2 NOT PY>2000
S11	27	RD (unique items)
S12	101001	(HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
S13	7611	S12 (S) (HOURS OR MINUTES)
S14	0	S10 AND S13
S15	7	S6 AND S1
S16	5	RD (unique items)
S17	4675	S6 AND (LIVER OR HEPATIC)
S18	0	S17 AND (LOSS (W) OF (W) VIABILITY)
S19	142	S17 AND HYPOXIA
S20	790	S17 AND (TRANSPLANT OR TRANSPLANTATION)
S21	30	S19 AND (HOURS OR MINUTES)
S22	18	RD (unique items)
S23	16	S22 NOT PY>2000

?

```
S S1 (S) (PURIFICATION OR PREPARATION)
            1545  S1
          811794  PURIFICATION
          482215  PREPARATION
     S24      17  S1 (S) (PURIFICATION OR PREPARATION)
?

RD
     S25      11  RD  (unique items)
?

S S25 NOT PY>2000
              11  S25
         7838014  PY>2000
     S26       5  S25 NOT PY>2000
```

?

T S26/3,K/ALL

26/3,K/1 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

11394013 PMID: 8679101
Stem cells from bone marrow, umbilical cord blood and peripheral blood for clinical application: current status and future application.
Lu L; Shen R N; Broxmeyer H E
Department of Medicine (Hematology/Oncology), Indiana University School of Medicine, Indianapolis 46202-5121, USA.
Critical reviews in oncology/hematology (IRELAND) Mar 1996, 22 (2) p61-78, ISSN 1040-8428 Journal Code: 8916049
Contract/Grant No.: R01 CA HL46549; CA; NCI; R01 HL 49202; HL; NHLBI; R37 CA 36464; CA; NCI
Publishing Model Print
Document type: Journal Article; Review
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... characterization and ex vivo expansion; (b) bone marrow stem cell transplantation; (c) cord blood stem cell transplantation; (d) peripheral blood stem cell transplantation; (e) fetal **liver stem** cell transplantation; (f) in utero stem cell transplantation; and (g) evaluation of the capacity of stem cells to serve as targets for gene therapy.

26/3,K/2 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)

04445058 PMID: 1123347
The structure of rat proalbumin.
Russell J H; Geller D M
Journal of biological chemistry (UNITED STATES) May 10 1975, 250 (9) p3409-13, ISSN 0021-9258 Journal Code: 2985121R
Publishing Model Print
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: MEDLINE; Completed

... hexapeptide Arg-Gly-Val-Phe-Arg-Arg attached to the NH2 terminus of the polypeptide chain of rat serum albumin. Edman degradation of a proalbumin **preparation** for 14 rounds gave the major sequence Arg-Gly-Val-Phe-Arg-Arg-Glu-Ala-His-Lys-Ser-Glu-Ile-Ala. A comparison of cyanogen...

26/3,K/3 (Item 1 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0013087934 BIOSIS NO.: 200100259773
Prospective identification and purification of multi-potent hepatic **stem cells**

AUTHOR: Suzuki A (Reprint); Taniguchi H (Reprint); Zheng Y W (Reprint); Fukao K (Reprint); Nakauchi H
AUTHOR ADDRESS: Dept. of surgery, Inst. of Clinical Med., Univ. of Tsukuba, Tsukuba, Japan**Japan
JOURNAL: Zoological Science (Tokyo) 17 (Supplement): p83 December, 2000 2000
MEDIUM: print
CONFERENCE/MEETING: Seventy-First Annual Meeting of the Zoological Society of Japan Yamagata, Japan September 21-23, 2000; 20000921
ISSN: 0289-0003
DOCUMENT TYPE: Meeting; Meeting Abstract
RECORD TYPE: Citation
LANGUAGE: English

Prospective identification and purification of multi-potent hepatic stem **cells**

26/3,K/4 (Item 2 from file: 5)
DIALOG(R)File 5:Biosis Previews(R)

0009245738 BIOSIS NO.: 199497267023
Characterization and enrichment of fetal rat hepatoblasts by immunoadsorption ("Panning") and fluorescence-activated cell sorting
AUTHOR: Sigal Samuel H; Brill Shlomo; Reid Lola M (Reprint); Zvibel Isabel; Gupta Sanjeev; Hixson Douglas; Faris Ronald; Holst Patricia A
AUTHOR ADDRESS: 601 Chanin Cancer Cent., 1300 Morris Park Ave., Bronx, NY 10461, USA**USA
JOURNAL: Hepatology 19 (4): p999-1006 1994 1994
ISSN: 0270-9139
DOCUMENT TYPE: Article
RECORD TYPE: Abstract
LANGUAGE: English

...ABSTRACT: fluorescence-activated cell sorting should facilitate further studies. In addition, because panning alone produced significantly enriched populations of fetal hepatoblasts, applications not requiring further cell **purification** could be performed with this simple technique.

26/3,K/5 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE

00404193 EMBASE No: 1975176589
Strategy of clinical bone marrow transplantations with emphasis on treatment of combined immune deficiency
Van Bekkum D.W.
Radiobiol. Inst., TNO, Rijswijk Netherlands
Transplantation Proceedings (TRANSPLANT. PROC.) 1974, 6/4 (373-377)
CODEN: TRPPA
DOCUMENT TYPE: Journal
LANGUAGE: ENGLISH

Combined immunodeficiency (CID) can be satisfactorily treated with HL A identical marrow. Sneak in is obligatory. Stem cell **purification** is recommended for faster reconstitution with less risk. Decontamination and reverse isolation are recommended in order to prolong the time available

```
for the sneak in...

...recommendation is based on the mouse data cited earlier). In case of
failure to decontaminate, patients should be treated by sneak in with
purified fetal liver   stem cells.
?


Set     Items   Description
S1       1545   (LIVER OR HEPATIC) (W) (PROGENITOR OR PRECURSOR OR STEM)
S2        133   S1 AND (CADAVER OR CADAVERIC OR DONOR)
S3      36096   (DECEASED OR POSTMORTEM OR DEATH) (S) (HRS OR HOURS OR MIN-
            UTES)
S4          0   S2 AND S3
S5       1383   S3 AND (CADAVER OR CADAVERIC OR DONOR)
S6      68433   (VIABILITY) (S) (CELLS OR ORGANS OR TISSUES)
S7         79   S5 AND S6
S8          7   S7 AND (LIVER OR HEPATIC)
S9          4   RD  (unique items)
S10        56   S2 NOT PY>2000
S11        27   RD  (unique items)
S12    101001   (HARVESTED OR COLLECTED) (S) (CELLS OR TISSUES OR ORGANS)
S13      7611   S12 (S) (HOURS OR MINUTES)
S14         0   S10 AND S13
S15         7   S6 AND S1
S16         5   RD  (unique items)
S17      4675   S6 AND (LIVER OR HEPATIC)
S18         0   S17 AND (LOSS (W) OF (W) VIABILITY)
S19       142   S17 AND HYPOXIA
S20       790   S17 AND (TRANSPLANT OR TRANSPLANTATION)
S21        30   S19 AND (HOURS OR MINUTES)
S22        18   RD  (unique items)
S23        16   S22 NOT PY>2000
S24        17   S1 (S) (PURIFICATION OR PREPARATION)
S25        11   RD  (unique items)
S26         5   S25 NOT PY>2000
?

COST
       28dec05 15:34:17 User259876 Session D831.2
            $9.21    2.710 DialUnits File155
               $8.36  38 Type(s) in Format  3
            $8.36  38 Types
    $17.57  Estimated cost File155
           $15.20    2.576 DialUnits File5
               $1.76  11 Type(s) in Format 95 (KWIC)
            $1.76  11 Types
    $16.96  Estimated cost File5
           $21.13    1.987 DialUnits File73
              $23.52  8 Type(s) in Format  3
           $23.52  8 Types
    $44.65  Estimated cost File73
            OneSearch, 3 files,  7.273 DialUnits FileOS
     $6.93  INTERNET
    $86.11  Estimated cost this search
    $87.03  Estimated total session cost   7.513 DialUnits
?
```

Return to logon page!

Refine Search

Search Results -

Term	Documents
(2 AND 12).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	26
(L12 AND L2).PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD.	26

Database:
US Pre-Grant Publication Full-Text Database
US Patents Full-Text Database
US OCR Full-Text Database
EPO Abstracts Database
JPO Abstracts Database
Derwent World Patents Index
IBM Technical Disclosure Bulletins

Search: L13

Refine Search

Recall Text | Clear | Interrupt

Search History

DATE: Wednesday, December 28, 2005 Printable Copy Create Case

Set Name side by side	Query	Hit Count	Set Name result set
DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; THES=ASSIGNEE; PLUR=YES; OP=AND			
L13	L12 and L2	26	L13
L12	L11 same (hour or hours or minute)	241	L12
L11	L10 same (hepatic or liver)	874	L11
L10	(viability) same (cell or organ or tissue)	31755	L10
L9	L8 and L3	45	L9
L8	L7 same (harvested or collected)	10499	L8
L7	(organ or tissue) same (hours)	59031	L7
L6	L2 and L4	7	L6
L5	L3 and L4	6	L5
L4	(deceased or postmortem or death) same (hr or hrs)	2042	L4
L3	L2 and (cadaver or cadaveric or donor)	372	L3

L2	(liver or hepatic) adj (stem or progenitor or precursor)	580	L2
L1	Reid-Lola-M$.in.	28	L1

END OF SEARCH HISTORY